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The 60s Brisbane House
COOL

cool The 60s Brisbane House

20 July – 22 August 2004
QUT Art Museum, 2 George Street, Brisbane

Curators Tracey Avery, Peta Dennis
Editors Tracey Avery, Peta Dennis, Paula Whitman
Research Peta Dennis

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Front cover/opposite **Wilson House** 1964, John Dalton
photo Harry Sowden

Back cover **Frost House** 1965, Maurice Hurst

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Stuart King, John Rostron.

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Foreword
John Hockings

When I was a student of architecture in the early seventies, the various architects and their work represented in this exhibition were an inspiration to a generation who were enthused by the idea of a local interpretation of modern architecture. Set against the sterile stylisms of the British new-Brutalism, and the delightfully futurist work of Archigram, which were the other prevailing 'isms' of the time, this fresh local work was immediate, relevant, and groundbreaking.

We looked to the works, and the ideas they contained, as a way of defining for ourselves just exactly what was and was not important in the making of a piece of architecture and how it should relate to place. And most importantly we saw, for the first time, ways of learning from the local vernacular which could be relevant to a new and modern architecture.

To me a number of moves were very significant. The first of course was the idea that the house was a vital and innovative space for architectural experimentation, a space which was indeed worthy and ideally placed to explore the place of the 'modern' human in the 'modern' world.

Having established an intellectual focus on the idea of dwelling, then a very significant innovation evident in many of these designs was the modernist location of the building on the ground plane, positioning the dwelling, finally, as a part of the local landscape. This 'coming down from the stump' moved away significantly from the traditional parti of the vernacular Queenslander.

What intrigued us as students was the new potential of the indoor-outdoor space of the traditional verandah transformed into a ground-based courtyard or terrace, with its new and provocative role as a transitional space which greatly increased the enormity of presence of the local landscape. Freed from the restrictions of structure, the new edge space was fluid, porous and extroverted, and drew the space of dwelling informally out and into the landscape and into the realm of the semi-public.

The other aspect of great interest to us as students in the work of these architects was the strong presence of climate as a major determinant of architectural form. Many of us share a certain bemusement in the current (and proper) emphasis on sustainable design, when we know that for many decades the absolute necessity for a responsible approach to sustainable house design including aspects such as orientation, cross-ventilation, shading, and insulation was simply a normal and accepted modus operandi for any architect worth their salt.

Within the newly established joint BCC-QUT Centre for Subtropical Design, these issues continue to fascinate us, and indeed, more than ever need to be researched and promoted if we are to re-invent an appropriate and livable local environment in the face of rapid urban growth and imported and inappropriate housing and subdivision solutions.

This timely exhibition is a refreshing reminder of the pioneering and innovative contributions of a generation of architects who shaped the Brisbane of the 60s, and whose influence was broadly felt and seen across the housing industry at that time.

Professor John Hockings
Head of School
School of Design and Built Environment
Queensland University of Technology

MLC Building Brisbane, 1955
Bates Smart and McCutcheon
photo Jennifer Taylor

The Australian Context
Jennifer Taylor

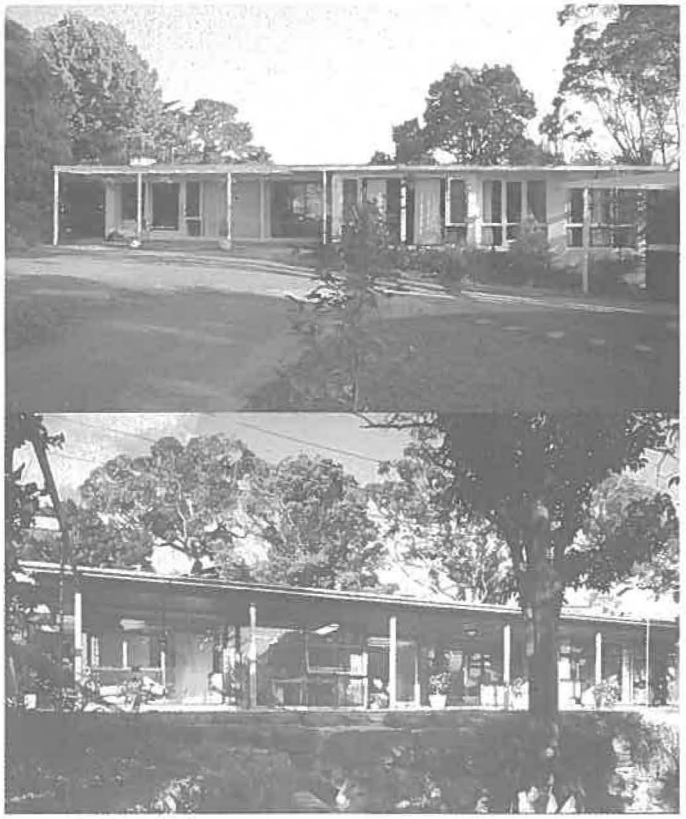
Architecture does not come about in isolation, but is the outcome of what has happened before and what is happening around it. Brisbane's houses of the 1960s emerged in a very particular progressive and optimistic period in Australia's history. The post-war shortage was over – the financial boom of the 1950s had provided opportunities for architects, for the first time in decades, to stretch their wings and to look towards an architecture to do justice to the country's newly attained global status.

For architecture the 1950s had been years for beginnings: the tall steel office building appeared in the cities and Australian firms such as Bates Smart and McCutcheon, and Stephenson and Turner had creatively adapted the American model to the Australian construction industry with results of world standing. The steel framed MLC Building in Brisbane, 1955, is typical of their lightweight construction, but with the addition of "egg-crate" sunshields. The larger cities were transformed from low-rise Victorian towns, and the first of the inner-city freeways was built – the Cahill Expressway, Sydney, 1950.

The Melbourne Olympic Games of 1956 had been the catalyst for new designs notable among which was the Olympic Swimming Pool by Murphy, Borland and McIntyre. The inventive technical excellence demonstrated in the Swimming Pool was also evident in the tensile language of the Myer Music Bowl of 1959 by Yunken Freeman Brothers, Griffiths and Simpson. The competition for the Sydney Opera House was held in 1957, and the building and the controversy that plagued its construction captured the attention of the Australian people, as well as the audience of the world. Architecture was news.

In the 1950s Sydney and Melbourne provided the leadership in housing. In Melbourne the structural inventiveness of the large structures was matched by the houses of leading figures such as Robin Boyd and Roy Grounds with designs both functional and geometric in their conception. In Sydney two contrasting new directions dominated domestic design. On the one hand were the crisp white houses drawing on European Modern Architecture, notably the work of Mies van der Rohe and, particularly through Harry Seidler, that of Walter Gropius and Marcel Breuer. On the other were the organic houses that clung to their sites, such as those by Peter Muller and Bruce Rickard, inspired by Frank Lloyd Wright, Walter Burley Griffin and Japanese traditional building. Somewhere between the two were the post-war houses of Sydney Ancher that date from the mid-forties onwards. These highly influential white modern houses adopted the order of Mies' geometry to the Australian terrain and opened up with terraces and veranda.

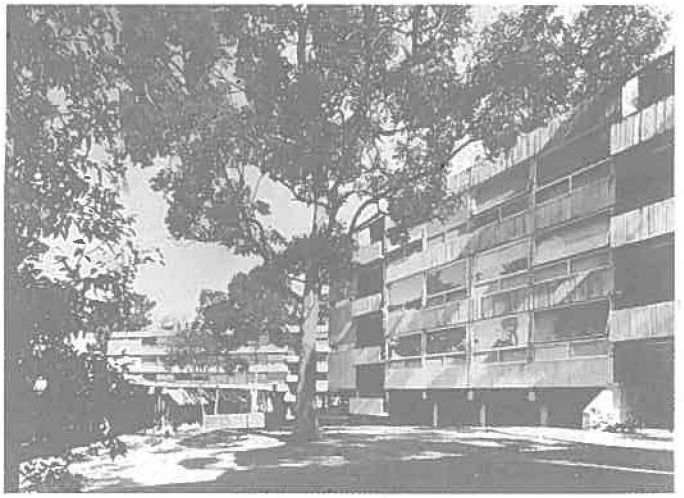
Enter the 1960s on the crest of this strong wave of new exploratory work. This was a period of consolidation trapped between the "progressive" drive of the 1950s and the changes of attitude of the 1970s, which arose from an increasing awareness of the negative effects of the early rush to develop. These concerns were voiced with the demand for impact assessments from concerned bodies such as the Resident Action Groups and the Builders Labourers' Federation who introduced the Green Bans in Sydney. In the 1960s, however, the freeways multiplied and the cities continued to grow both upward and outward. In 1961 the skyline of Sydney was pierced by Australia's first "skyscraper": the AMP Building by Peddle Thorpe and Walker. However, an increasing climatic and contextual consciousness became evident and the glazed curtain-walls of the previous decade gave way to sun-screening attachments and concrete cladding designed to reduce the heat absorbed by the buildings. Establishing precedence was McConnel Smith and Johnson's Waterboard Building of 1965 and Seidler's Australia Square of 1967.



House Sydney, 1957
Sydney Ancher
collection of Jennifer Taylor

An original solution to the problem were the T-shaped concrete sun shields of the accomplished Council House, Perth, 1963, by Jeffrey Howlett and Donald Bailey.
Living in the inner cities was promoted with proposals for central high-density developments. Blues Point Tower, 1961, Sydney, by Seidler, is the sole element to survive from the master plan for McMahons Point prepared by Seidler and others in 1957. Among the most extensive proposals were those for the Sydney Cove Redevelopment Scheme, 1962, which combined commercial and residential towers. This project was disbanded in the more conservation-minded years of the 1970s. Among the most sensitive of the new apartments was the terraced Penthouses, Sydney, 1967, by Ken Woolley that introduced a new model for urban living. Highly significant for Queensland architecture were the architecture, writings and teachings of Karl Langer, and his Lennons Hotel, Broadbeach, 1957, is arguably the most significant building of the decade in Queensland.
While Seidler, Ancher, Grounds and Boyd continued to demonstrate the possibilities for Australian housing of modern architecture, a further development inspired by Alvar Aalto and Corbusier's Jaoul Houses combined with the earlier Wright-inspired thinking to produce the site-oriented Sydney School architecture of textured brick and timber. The Sydney School architecture rose in partnership with a reassessment of the Australian landscape as championed by such landscape designers as Bruce MacKenzie in Sydney. Seminal to the ideas of this movement were the houses of Ken Woolley, 1962, and Peter Johnson, 1963. The ethic and aesthetic of these houses was soon taken up in non-domestic work and became widespread throughout much of the country. A related timber architecture designed to be in accord with Australian conditions can be seen in the 1960s Victorian buildings of Kevin Borland. The architecture of Queensland also fell into step with this new sensibility to climate and Australia as place. Maurice Hurst, Robin Gibson and John Dalton were among the architects of the 1960s who sought to design with a modern aesthetic attuned to local building practices and considerations of site and climate. Dalton and Gibson's work was published and buildings such as their own houses, Dalton 1960, and Gibson 1963, provided examples for contemporary houses appropriate for the subtropics.
Of importance in the 1960s were the project homes developments that attempted to provide architects' services to the general buying community. The RAIA, Victoria Chapter, had commenced the Small Homes Service in the 1950s but the first major architect-designed developer-promoted project housing did not occur until the Carlingford Exhibition, Sydney, of 1961. In the 1960s and 1970s project housing, from firms such as Pettit and Sevitt and Civil and Civic, provided thousands of quality homes for the middle market.
The expressive use of brick in the Sydney School work was matched throughout Australia by an equal interest in the potential of concrete to provide expressive sculptural form. James Birrell in Queensland had led the way in 1959 with the inventive sculptural design for the Centenary Pool, Spring Hill, which was followed in 1961 by his Wickham Terrace Carpark, and Union College, University of Queensland. Also significant among the 1961 examples of this Brutalist work were the Hale Memorial School in Perth by Marshall Clifton and Tony Brand, and the bold Taxation Building, Brisbane, by the Commonwealth Department of Works.
Throughout the decade Queensland continued to to provide examples of innovative concrete design combined with structural innovation, such as Birrell's J. D. Storey Hall of 1965 and Gibson's Wheat Silos at Pinkenba, 1969. Canberra too, notably with the buildings of Enrico Taglietti, received many fine examples in the

House Wahroonga, Sydney, 1961
Bruce Rickard
collection of Jennifer Taylor



Union College University of Queensland, 1961
James Birrell
photo Knell and Chester

1960s of dramatic concrete forms fashioned from program and structure. Edward Madigan Torzillo and Briggs' winning design for the 1968 competition for the Australian National Gallery further demonstrates the interest in the logic and potential drama of off-form concrete.

So where does Queensland and the Brisbane house sit in this post-war history? In the 1950s Queensland was relatively outside the mainstream of Australian architecture, and, while there was considerable investment in office buildings after 1954, Brisbane did not really share the drive and optimistic thrust forward of the larger cities. Post-war austerity measures had had their depressing effect on the production of architecture in Queensland as they had throughout Australia. Immediately after the war the traditional veranda house was clearly beyond the availability of materials and means, also it was "old-fashioned" and undesirable. While asymmetrical raised timber houses later became possible, the "fibro" or timber bungalow became normal fare in builder housing. The architects turned to the precedence of the southern states, and brick joined timber for the more affluent houses. Despite the efforts of firms such as Hayes and Scott, Theo Thynne and Associates, and Lund Hutton Newell, to provide for local conditions notably in the field of housing, on most counts Queensland was rarely well served by architecture in the 1950s. Brisbane suffered from a financial squeeze early in the 1960s and was not subject to the pressures that encouraged upward development in the south, in part due to the fact that it was not a large migrant port, as were Sydney and Melbourne. Generally Brisbane was conservative and lacked the urge to exhibit the modernity or prestige that characterized the larger cities. Also conservative was the view of the city as a place to work and shop, and the rapidly expanding sprawling development around Brisbane at this time testifies to the in-born belief in the suburbs as the appropriate place for dwelling. This was not helped by the absence in the city of major cultural buildings that did not appear until the 1980s. Further, Brisbane turned inward away from the river towards Queen Street and did not offer many of the attractions of the southern cities. Consequently, Brisbane exhibits little in the way of innovative public or commercial buildings or inner-city housing in this period.

Principally, two major bodies of work put Queensland on the architectural map in the 1960s. One was the concrete buildings of Birrell and Gibson, and the other the beginning of the distinctive housing that realised it most mature designs in the 1970s. The first was in step with the general interest in concrete construction throughout the country. The second also relates to general tendencies in Australia towards a more appropriate architecture attuned to Australian conditions. Modern architecture, notably the work of Mies, clearly underpins these designs. Yet, as with the houses of Ancher, the rigidity and universal relevance of the German designs are modified by the local context. This is particularly true of Dalton's buildings that become highly expressive of the climatic control measures in both plan and form. While there was much precedence in early architecture of the region for the 1960s architects of Queensland to draw on, there were few leads from local achievements of the previous decades, with notable exceptions such as that provided by Langer. Queensland, however, was fortunate in that there emerged at this time a handful of creative and capable architects who provided the early inspiration, and paved the way, for the renaissance of Queensland architecture that followed.

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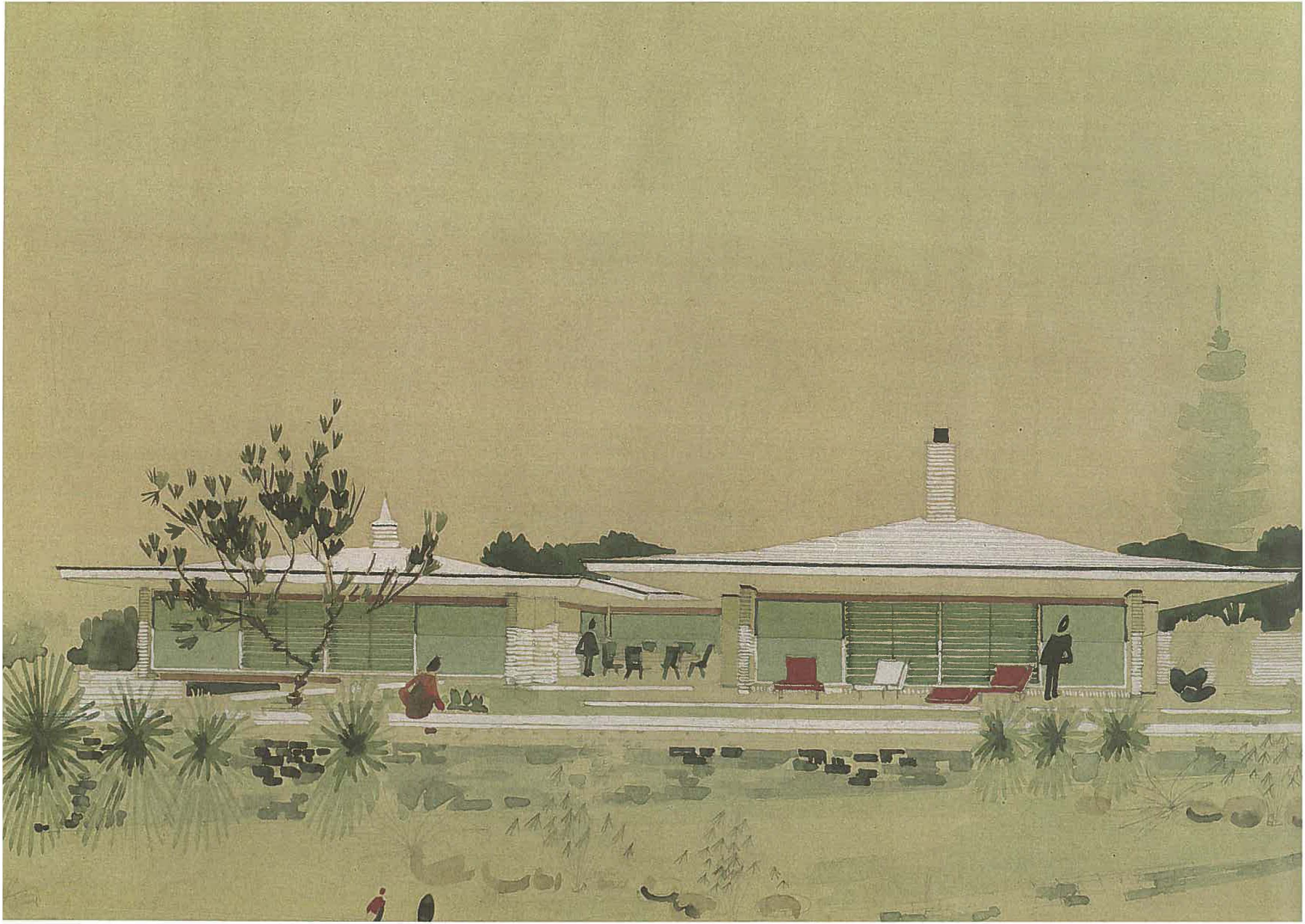
Taxation Building Brisbane, 1961
Commonwealth Department of Works
photo Jennifer Taylor



The Australian House in the 1960s
Philip Goad

If the 1950s architect-designed house in Australia had been about postwar recovery from austerity, materials shortages, size restrictions, and an engagingly innocent embrace of and experiment with the new, the 1960s house was a decidedly different proposition. Australian architects were faced with two enticing opposites. On the one hand, the 1960s were years of demonstrably greater affluence. A newly confident middle class had increased consumer spending power and were able to acquire items like television and the second car, to dabble with air-conditioning, even central heating, entertain expectations of a family room and an ensuite bathroom, and even a swimming pool. In short, 'good life modernism'[1] was now available. On the other hand, that muse of postwar architects, the modern, had for many architects fallen short. The critical dilemma was not the paucity of expression available to the modern architecture, but rather that the 1960s was the decade when architects might do anything, when the choice was not singular but multitudinous.

Yet while internationally, Archigram explored cities that walked across landscapes and Buckminster Fuller became the darling of all architecture students with his scientifically determined geodesic domes, and world expo sites in Montreal (1967) and Osaka (1970) realised every architect's wet dream with experiments of plug-in systems and Metabolist confections, in terms of the detached house, architects appeared, at least in Australia, to reconsider the modern, in effect to begin again. There was not a rejection of the modern, but a return in many respects to first principles.

Mathers House 1964
Steve Trotter at Fulton Collin & Partners
Trotter Moss & Partners archive

Three generic themes dominate in this idea of 'return': the room; the rule; and the roof. Through these themes it could be argued that domestic architecture in Australia began to shake off the self-conscious copying of form and style of previous decades as a generation of architects schooled in ideas dramatically different from the eclectic abilities of pre-war architects began to practice and design houses. The 1960s, far from being a trough of aesthetic thought, saw the search for a local architecture appropriate to its place, its landscape and its city, mindful of local materials, climate and construction practices. Above all, there was a conscientious search for a language that might rightly be thought of as domestic.

Return of the room

A reassessment of the aesthetic ideals of postwar modernism took place in the 1960s. Nowhere more visible was this reassessment than in the design of the suburban house. The return to the compartmented plan, natural materials and vernacular methods of construction, a search for traditional symbolic references to home, truth in structure and especially expression of materials were all part of this process. A crucial indicator was the move away from the concept of uninterrupted horizontal space and the centrifugal movement to the perimeter of the building plan toward an exploration of enclosed volume and a rigorous investigation of the section. The theories and architecture of Louis Kahn, and Charles Moore, the 'labyrinthine clarity' of Aldo van Eyck, and the deliberate avoidance of hierarchical notions of space in contemporary British architecture ensured a pause in the search for spatial purity. In terms of the home, such a pause was eagerly welcomed. Though aesthetically ideal, the open plan and uninterrupted flat lamina of volume had not always positively triggered the domestic psyche. The 1960s saw a return to primitivist notions of space and shelter, a search for the centre, a celebration of a perceived vernacular and the investigation of sculptural volume. A number of architects began to write or comment about such ideas: amongst them, Peter Kollar in New South Wales; Dirk Bolt in Tasmania; and Judith Brine in Victoria who would be quoted in 1968 as saying in an article on women architects that houses *"should either be like caves (built of bricks) or tree-top pavilions (built of timber)"*.[2]

Such an idea of houses made up of pavilions and pods, or designed as architectural caves related directly to the resurgence of the idea of room. Architects like Kollar, Denis Rourke, Peter Johnson, Tony Moore and Ken Woolley in New South Wales; Brine Wierzbowski, Neville Quarry and John Reid in Victoria produced houses that celebrated the everyday materiality of clinker and stock bricks, and off-sawn timbers. Even Robin Boyd started designing houses as grouped pavilions in his second Richardson House, Barwon Heads, Victoria (1961) while Harry Seidler's own off-form concrete house in Killara (1966–67) was an exploration of contained living platforms hung in space. These were houses about walls that contained rooms of human scale. Parallel to this humanist interest in the room via America and English New Brutalism, the return of the room was also part of a renewed interest in the Wrightian theme of 'the nature of materials' and an empathetic relationship with the landscape, much cultivated with the publication of Wright's *The Natural House* (1954). The 1960s saw across Australia a new generation of Wrightian admirers who would extend and produce highly original interpretations of organic architecture through to the 1970s.

In Melbourne, noted residential practitioners Chancellor & Patrick continued to produce sophisticated hybrid modern Wrightian designs while added to the fold were Charles Duncan, Geoffrey Woodfall, David Godsell, and Jorgenson & Hough. In Sydney,

there was an equally strong following: Peter Muller, Bruce Rickard, Ian Mackay, Ross Thorne, Neville Gruzman and the idiosyncratic Stan Symonds all extended Wright's principles of organic architecture. In Canberra, Alex Jelinek, Laurie Virr and Enrico Taglietti kept the flame alight as did Ray Heffernan in Tasmania, and in Queensland, Eddie Oribin brought Wright to the tropics. In all states, Wright's Usonian house was distilled and reinterpreted, its theme of simultaneous spatial containment and snug hearth countered by banks of modular windows and the spatial release of the open plan into the landscape highlighting universal ideas of dwelling applicable to the everyday house.

Another theme that had been explored sporadically during 1950s was the exotic influence of Japan. In January 1960, *Architecture and Arts* ran an article entitled *"Japanese Houses for Australia"* where it was purported that *"Japanese design fits today's Australian house like a glove"*.[3] The reasons behind such a statement were the modular quality of the contemporary architect-designed house, the reliance on structural pattern for decoration in the same way as the darkened post and beam frame of the traditional Japanese house, the adjustable open plan with sliding screens and adjustable privacy, and the easy relationship between indoors and out achieved through the deployment of modestly-scaled courtyards. Interest in the traditional and contemporary architecture of Japan was further encouraged by Robin Boyd's two books *Kenzo Tange* (1962) and *New Directions in Japanese Architecture* (1968) and increasing numbers of architectural tourists from the early 1960s. Architects like Boyd in Melbourne, Neville Gruzman and Peter Muller in Sydney, Wally Greenham in Perth, and Donald Spencer in Brisbane thus explored Japanese architecture in a variety of ways from sophisticated interpretations of pavilion planning through to stylised Japanese interior design with bamboo wallpapers and authentically reproduced shoji screens.

Return of the rule

Associated with the return of the room was the organising device of the constructive module. By the late 1950s, architects now began to move beyond the pragmatic device of the module as a way of designing economy into the postwar small house. They began to experiment with the module as a formal device, as a rule-giving element to form and space. This signal of the return of artifice in design, in essence a return to an idea of rule took essentially three forms.

The first was a move towards formalism where composition acquired greater or equivalent status to that of the module. Houses by Guilford Bell and Neil Clerehan in Melbourne, Dirk Bolt in Canberra, and Ian Brackenridge in Perth explored issues of symmetry, parti and subdued abstracted references to formal domestic tastes of the 1930s in associated house types like the atrium house, the Palladian villa and the pavilion. By contrast, a different formality was explored in the Brisbane houses of Gabriel Poole, Geoffrey Pie, Theo Thynne and Robin Gibson where the rigours of modernism were fully exploited. Rule here was about a return to the compositional strategies of De Stijl and the serene abstractions of Mies van der Rohe. These architects and others interstate like Glenn Murcutt, Allen Jack & Cottier, and Bowe & Burrows in NSW, John Adam and McGlashan & Everist in Victoria, and Raymond Jones in Western Australia employed efficient structural means, a reduced palette of materials, generous amounts of glass, and elegantly simple details that paralleled American houses by architects like John Johansen, Richard Neutra and Edward Larrabee Barnes. These architects understood the limitations of the open plan but were also its most accomplished exponents. The successful integration of garden and house are highlights of these pristine and often glamorous modern homes. Their clients were inevitably amongst the wealthier of Australia's homemakers and consequently the most sophisticated in their appreciation of spatial subtlety and financially equipped to furnish the wide-open spaces of these houses with elegant pieces of modern furniture and works of fine art. They were also clients who could often afford the luxury of air-conditioning.

The second use of the rule was the expression of the module to define an almost limitless house, one of repetitive addition. In the early 1960s, John James perfected the modular post and beam frame in timber as a design device in a series of more than one hundred houses across the Sydney suburbs. Other architects like Bernard Joyce and Jean Fombertaux built houses of steel or timber but the module was now explored in three dimensions and over a series of floors as an extendable three-dimensional grid. Rule in these cases was determined by the structuralism of the frame, an organising device that could have application to larger projects, and indeed such experiments were prescient of much larger megastructural projects that would be explored at an urban scale by the late 1960s.

The third use of the idea of rule was then to the transformation of these moderate modern houses into houses for everyman: project or prototype houses. In Brisbane, John Dalton and Peter Heathwood's Plywood Demonstration House (1958) was intended as a material and structural exemplar for repetition across the suburbs. In Sydney, Don Gazzard perfected the courtyard house as a project house at the Carlingford display village, while in Melbourne architects like Geoffrey Woodfall contained the organic excess of Frank Lloyd Wright to produce some of the most successful project house designs for CHI Homes from 1965, and in effect helped to define a new suburban vernacular.

Return of the roof

A formal corollary of the return of the room and the rule was the return of the visibly prominent roof – as a gable or a hip. A new appreciation of the vernacular, the interest in Japan and Louis Kahn's ideas and admiration for the houses of architects like Pietro Belluschi, John Carl Warnecke, Charles Moore and a host of other 1960s American architects meant that local architects no longer seemed to fear the domestic connotation of such roofs or in many cases, the visible use of corrugated iron or terra cotta roof tiles. Thus architects like John Chappel in Adelaide, Roger Johnson in Perth and even Robin Boyd in Melbourne now embraced the roof as an expressive element of contemporary domestic design. For the Wrightians, the roof had never been rejected. It was now explored with even greater intensity and the 1960s houses of Charles Duncan, Peter Muller and Eddie Oribin represent some of the accomplished interpretations of Wright's organic architectural principles in Australia.

In Queensland, however, architects had never completely eschewed the roof as it had been in the southern states.[4] In fact, the retention of the roof as a visible and distinctive element was what had given modern Queensland domestic architecture since the 1930s its distinctive quality. Hayes & Scott from the late 1940s, John Hitch and Maurice Hurst throughout the 1950s had acknowledged the roof as a necessary water shedding and shading device. One of the key Brisbane houses of the 1950s was Hayes & Scott's Jacobi house, Indooroopilly (1957) with its pagoda-like pyramid roof, supported off plywood trusses and verandas on three sides.[5] Brisbane architects were unafraid to use the roof for venting, clerestory lighting and oblique reference in some cases to the traditional Queensland house. By 1960 John Dalton, Steve Trotter and Bill Carr had begun to explore the roof as part of a determinedly scientific approach to the study of climate, not only designing houses that explored notions of self-venting roofs, shading techniques, concepts of the parasol and thermal barriers but they were also publishing articles and books on climatic design. Only in Perth in the houses of John White was the roof also consciously explored for its potential as a climatic controller, as well as a sculptural signifier of home.

Keys for the future

By 1972, the Australian house had reached extremes of development, from the modernist palace by architects like Guilford Bell in Melbourne and Neville Gruzman in Sydney to the architect-designed project house, the house for everyman, perfected by architects like Ken Woolley and Michael Dysart for Pettit & Sevitt in Sydney, Graeme Gunn for Merchant Builders (complete with integrated landscape designs by Ellis Stones), and Peter Overman for Corser Homes in Perth. By that date too, the chamfer (the 45 degree angle) had begun to inform the work of Kevin Borland and Daryl Jackson in Melbourne.

The Australian architect-designed house in the 1960s was thus in many ways a reflection of the multifarious and complex state of architecture across the world. In Australian architectural histories, the diversity and value of that architecture in all Australian states has not been emphasized enough. An interest in region, landscape and natural materials was widespread not localised. In Tasmania, for example, the austerity of climate and the popularity of concrete block (amongst architects) realised an enclosed architecture where protected outdoor space and small punched openings in walls were pragmatic and sensible 'modern' responses. An interest in climate was also widespread and not localised. In Western Australia and Queensland, particular wind and sun conditions encouraged specific formal responses that meant new formal experiments with roof shape and floor plan.

An interest in addressing the forms of the Australian city was also evident with terrace house experiments from Dickson & Platten in Adelaide, David Saunders in Melbourne, and John Railton in Brisbane. In short, the 1960s house should be regarded as a rich lode for further architectural investigation. For therein lie many of the keys to the problems of monumentality being addressed in the nation's capital and across its university campuses, and above all to the extraordinary gulf between the voracious development of all state capital cities at the hands of corporate commerce and the increasingly distant and (what was then) largely idyllic life that was to be had in the suburbs.

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University of Melbourne.

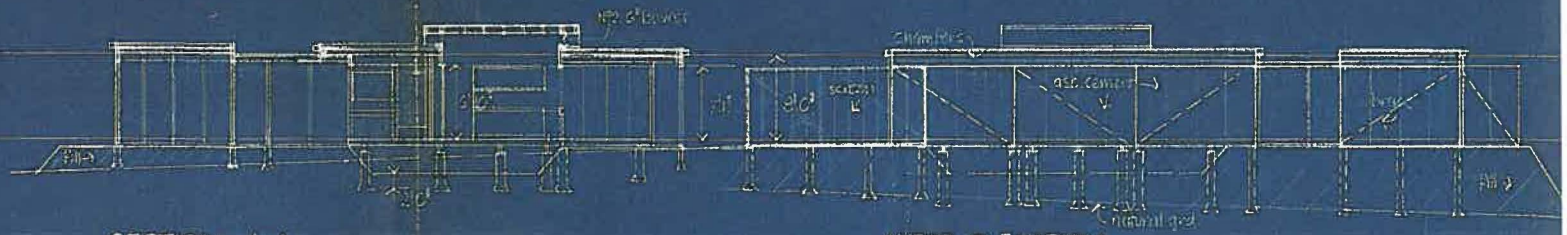
[1] Mark Jarzombek, *" 'Good-Life Modernism' and Beyond" The American House in the 1950s and 1960s – A Commentary", The Cornell Journal of Architecture*, 4, 1990, pp76–93.

[2] Judith Brine, quoted in Keith Bennetts, *"How would you like to live in a cave?", Australian Home Beautiful*, March 1968, p7.

[3] *"Japanese Houses for Australia?", Architecture and Arts*, January 1960, pp20–24.

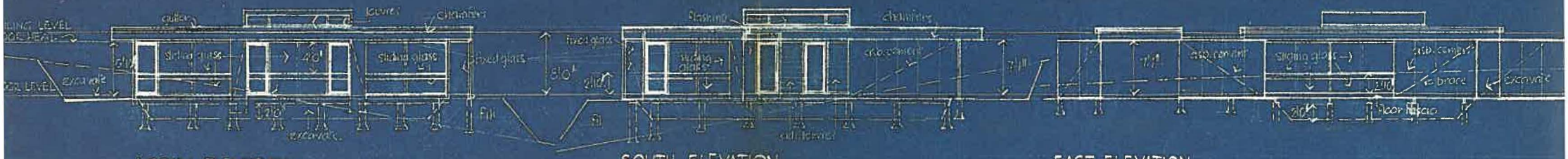
[4] The exception was Robin Boyd's series of parasol-roofed houses of the 1950s (that included amongst others the Myer House, Mt Eliza [1956–57]; Holford House, East Ivanhoe [1956] and Clemson House, Kew [1959]) and which followed the principle of separating the roof from the volume of the house beneath. This was an idea explored in parallel in a series of houses in Florida designed by Paul Rudolph and Ralph Twitchell.

[5] Eric Wilson, *"Pioneer in New Form", Australian Home Beautiful*, July 1965, pp4–7.



SECTION A-A

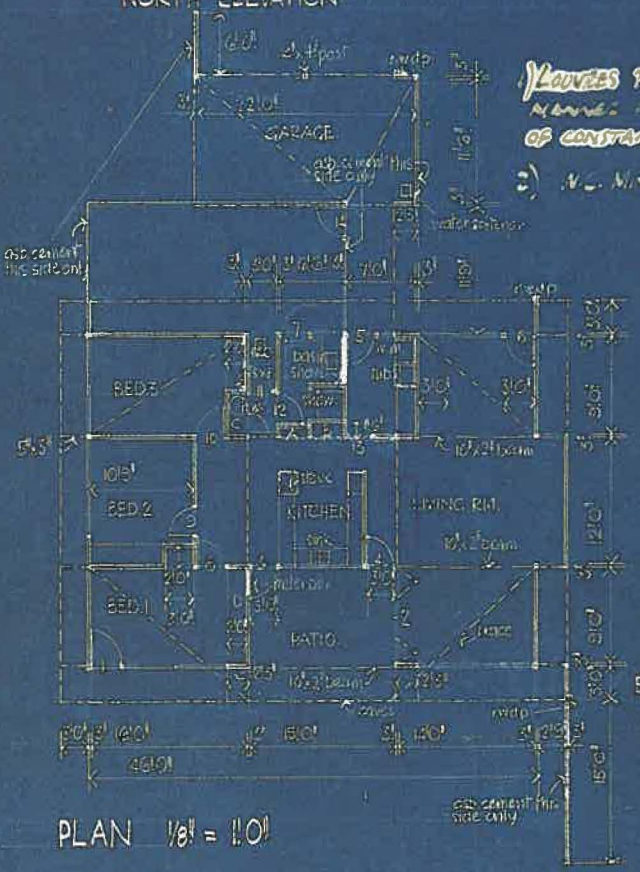
WEST ELEVATION



NORTH ELEVATION

SOUTH ELEVATION

EAST ELEVATION



Louvres to be fixed in such a manner as to allow of constant ventilation

2) No minimum size required

PLAN 1/8" = 1'0"

FOUNDATION PLAN

ROOF PLAN

HOUSE AT FIGTREE POCKET ROAD FOR J.H.& S. DALTON

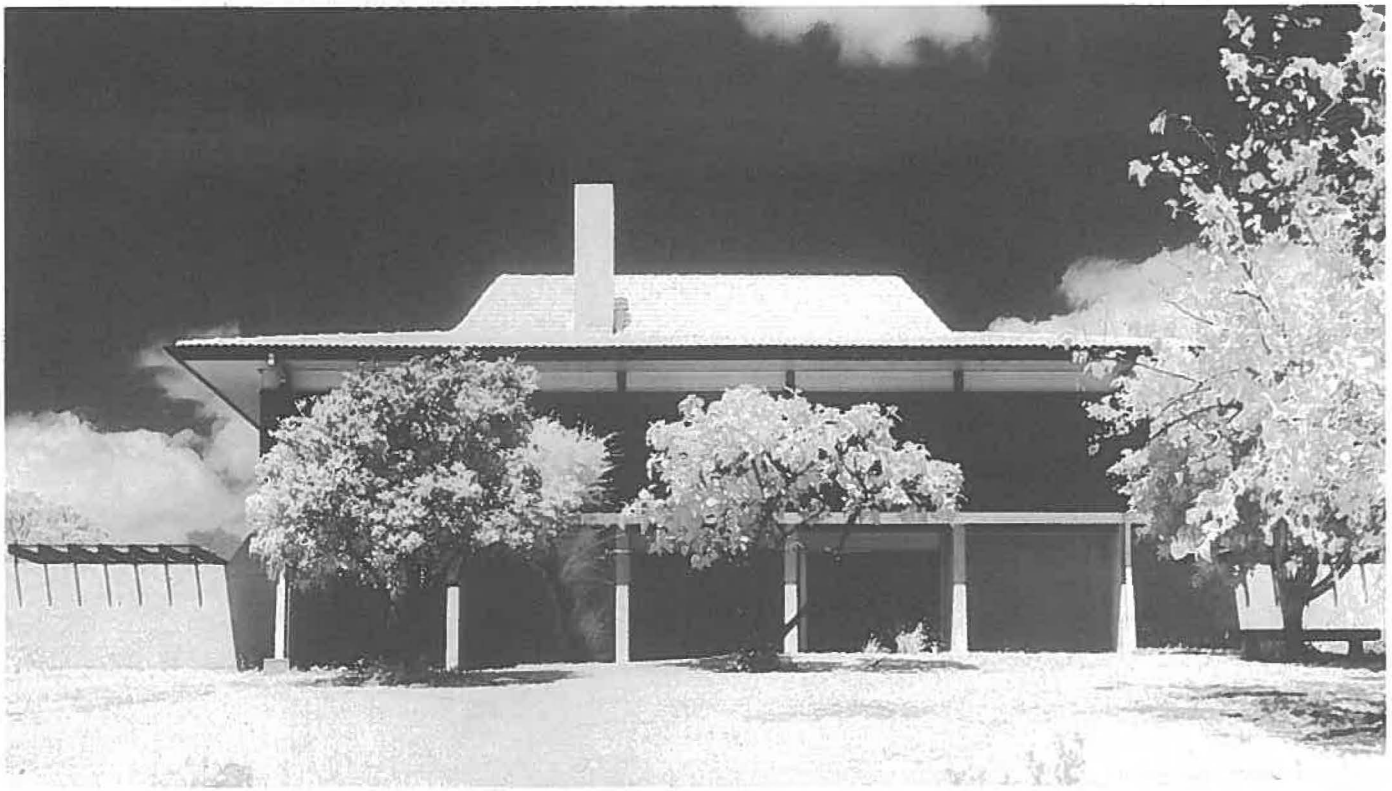
JOHN DALTON A.R.A.I.A. ARCHITECT
CITY MUTUAL LIFE BLDG. QUEEN ST
BRISBANE

Introduction

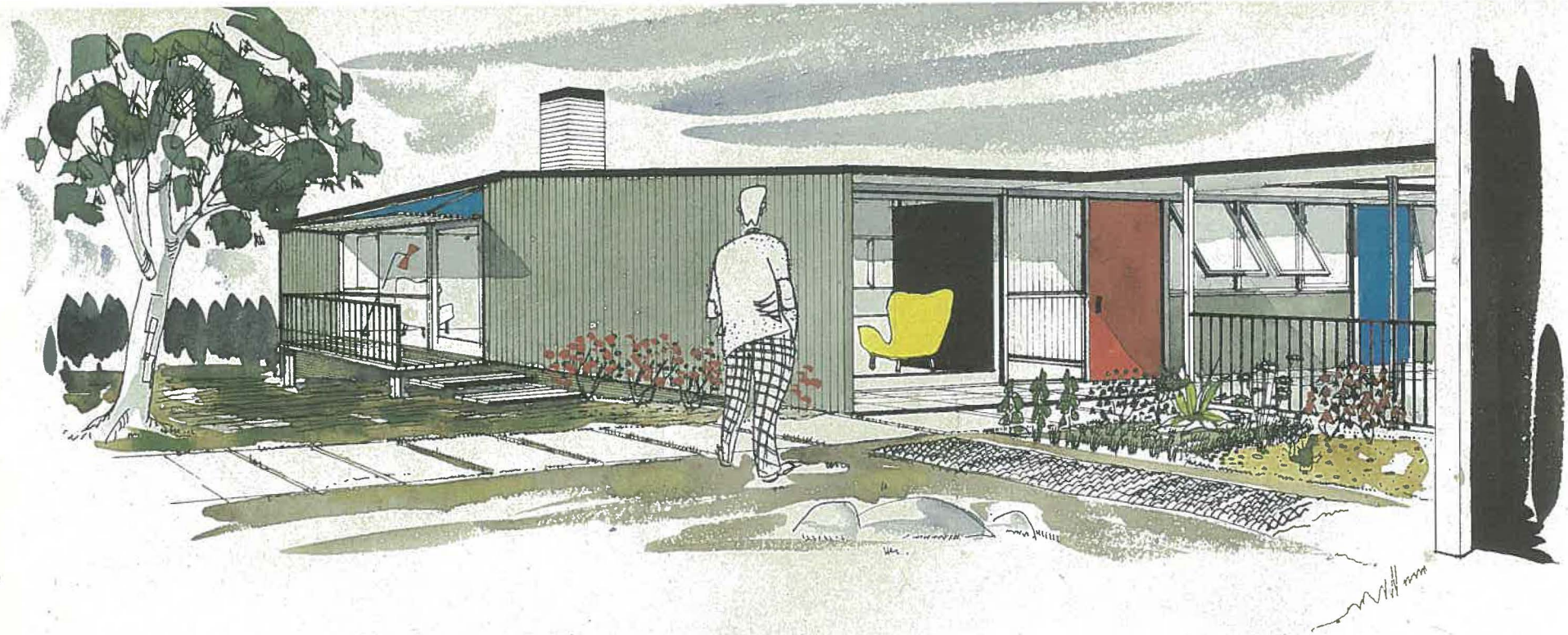
Post-World War Two, domestic architecture in Brisbane began breaking new ground. There was a move away from traditional housing forms, coupled with a desire to create a new type of architecture in the rebuilding period after the war. This process began during the fifties and matured in the architecture of the sixties. The architects, who trained in offices in the fifties, carried the ideas absorbed in these offices through to their work in the sixties. This period also saw the decline of modernism as the prevailing architectural ethos. By the seventies, new modes of thought were emerging and modernism was seen as outdated. Architect-designed houses of the sixties encapsulated many contemporary architectural and social ideas which were reflected in built form.

The following essays examine a particular period of Queensland architecture, the work of the 1960s, and focus on houses designed by Brisbane architects. The themes evolved from research carried out for an architectural thesis on the subject.[1] The most interesting part of this research was a series of interviews with eleven architects who discussed their work of the 1960s. These interviews provided a valuable opportunity to gain a first-hand insight into how each architect designed particular houses. It is recognised that these essays and the accompanying exhibition are not a complete record of house design in Brisbane in the 1960s and that some notable architects of the period have not been discussed. Nevertheless, it was considered important to document, display and publicize the results of this research now, to acknowledge the work of the period, to highlight the on-going relevance of the work to contemporary design, and to encourage further research in this area.

Dalton House 1960
John Dalton
collection of John Dalton

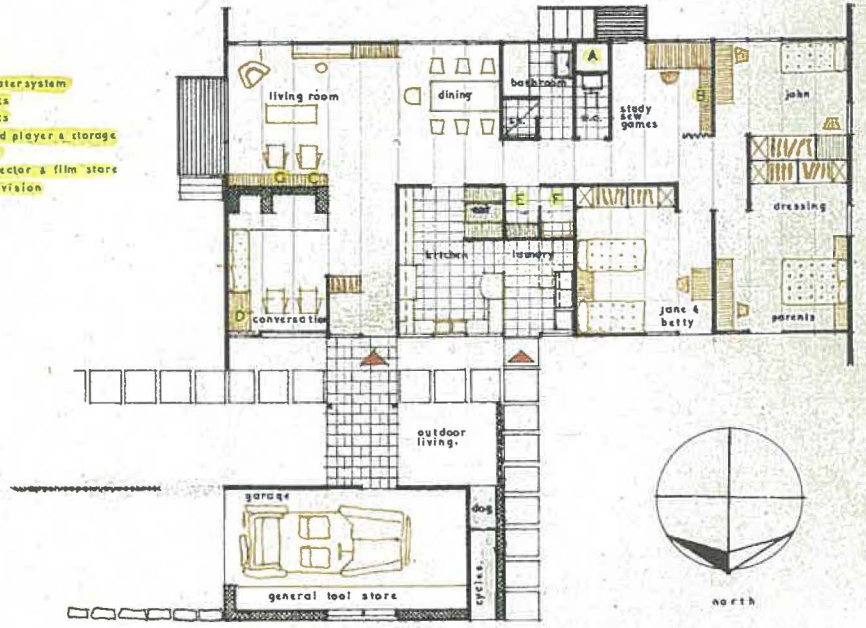


Smith House 1966
John Dalton
photos Geoff Dauth
collection of John Dalton



PERSPECTIVE

A hotwatersystem
B books
C books
D record player & storage
E linen
F projector & film store
G television



PLAN

A HOUSE DESIGN

DESIGN & COMP. III. DIPLOMA. 4. OCT. '54 TWO SHEETS. FINISHED DRAWINGS.

The Prelude
architectural education and training

Architects who were designing innovative houses during the sixties were trained and influenced by the architects of previous decades. Eight of the architects interviewed completed their architectural training in Brisbane. Each architect related their experiences, both positive and negative, received during their training and working lives as students.

University Education

Architectural education in Brisbane during the 1950s generally consisted of a two-tier system, with the first three years at the Brisbane Central Technical College (BCTC) and the last three at the University of Queensland (UQ). Students studied part-time and worked in architectural offices during their studies, as a requirement of the course. There was also a full-time course, with no work experience, consisting of four years at BCTC with the final two years at the university.

Opinions varied about the quality of education received from the college and university. Most lecturers were not academics but were drawn from Brisbane architectural practices. According to Dan Nutter, a contemporary of the architects under study: *"They (the lecturers) were dedicated, very good in their practical sense and in terms of architecture as it was practiced, but not very much ahead in ideas".*[2]

Gabriel Poole has described his education as a negative experience: *"All the architecture course ever meant to me was that I eventually got a certificate so that I could become an architect. I didn't learn anything there. ... They presented us with a debased International Style formula and we were expected to design to this formula".*[3]

Student drawing 1954
John Dalton
collection of John Dalton

Geoffrey Pie agreed with Poole's opinion about their college education and says that living in two different Mervyn Rylance houses as he was growing up taught him more about good architecture.[4]

John Dalton had a more positive opinion about his university training. He said: *"But one thing I do remember, we all wanted to be like our senior members of the profession. There were no radicals in terms of 'them' and 'us'. The professor at the university wore a bow tie, and we all wanted to, one day, be able to wear the bow tie. The members of the profession were very 'honourable men' and very highly regarded".*[5]

Hayes & Scott office 1950s
left to right Cam Scott, Eddie Hayes, John Dalton, Ian Charlton, George Henderson.

Steve Trotter recalled that most of his lecturers were practising architects, not academics: *"We used to hang on their every word because they were out there doing the work and doing it well."*[6]

Several architects mentioned particular university lecturers who had a positive influence on their training. Robin Gibson regarded Bruce Lucas, John Hitch and Bob Cummings as *"good practical people"* who taught the students common sense.[7] Don Winsen regarded Jack McWilliam, the structural engineer, as his most influential lecturer at university. McWilliams's attitude was that there was no division between architecture and engineering and that an architect had to think like an engineer and be both practical and creative. Geoffrey Pie acknowledged Karl Langer's teaching in town planning as being excellent, and valued the way Langer taught him about the use of spaces, both between and inside buildings.

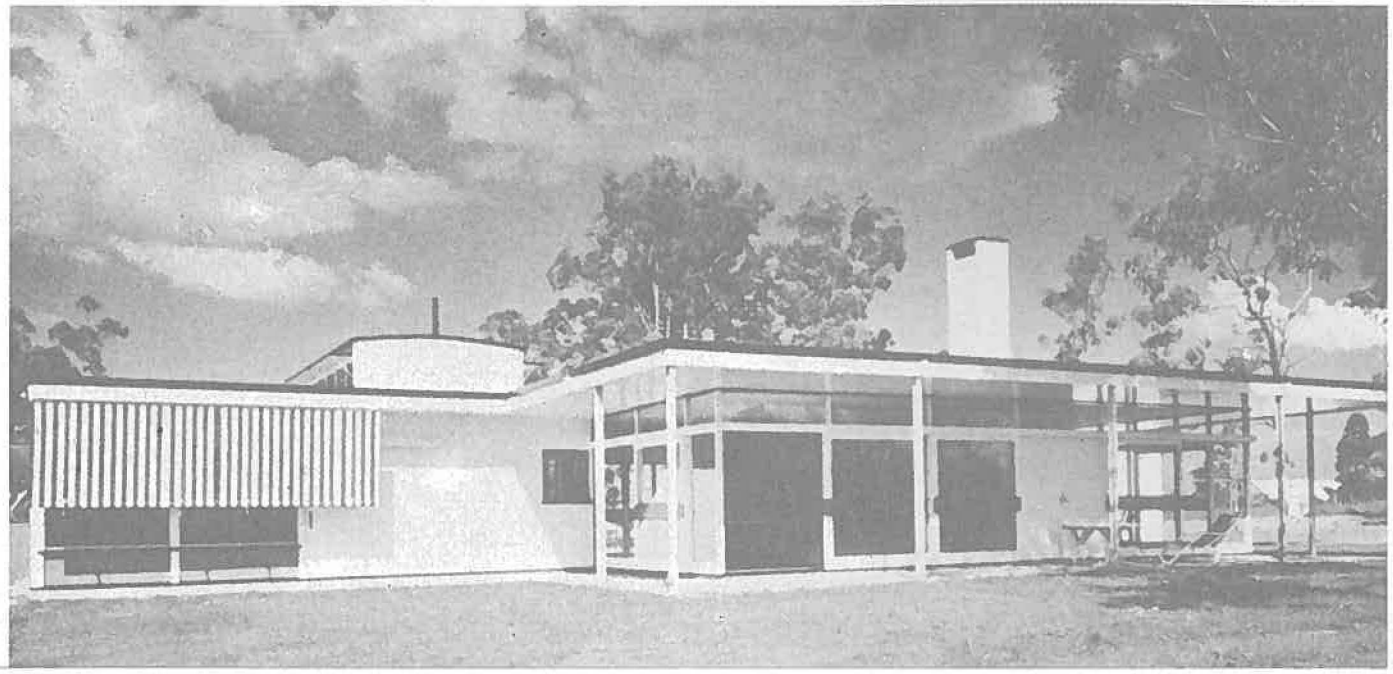
Peter Heathwood recalled that most of his fellow university students in the early 1950s were mature-age ex-servicemen.[8] These students were married men with children who had served during the war. This made them serious and dedicated about the course and determined not to waste time – attitudes which made a good impression on Heathwood as a student.

Maurice Hurst received his architectural training at the Hammersmith School of Building, which was established by William Morris in London. Hurst said that the school had a major influence on his approach to architecture. From ages 13 to 17, he gained practical experience in bricklaying, carpentry, plastering and plumbing. He then completed his architectural training at the same school after the war and graduated in 1953. He recalled that: *"Architecture was oriented towards skilled drafting, a painter's eye for colour and texture, and a sculptor's approach to space and form".*[9]

Office Training

Most architects recalled that the people who trained them in the architectural offices where they worked in the 1950s had a more positive influence on their work than their university training. The experience obtained working alongside practicing architects

Houses 1950s, Hayes & Scott
RAIA "Buildings of Queensland"

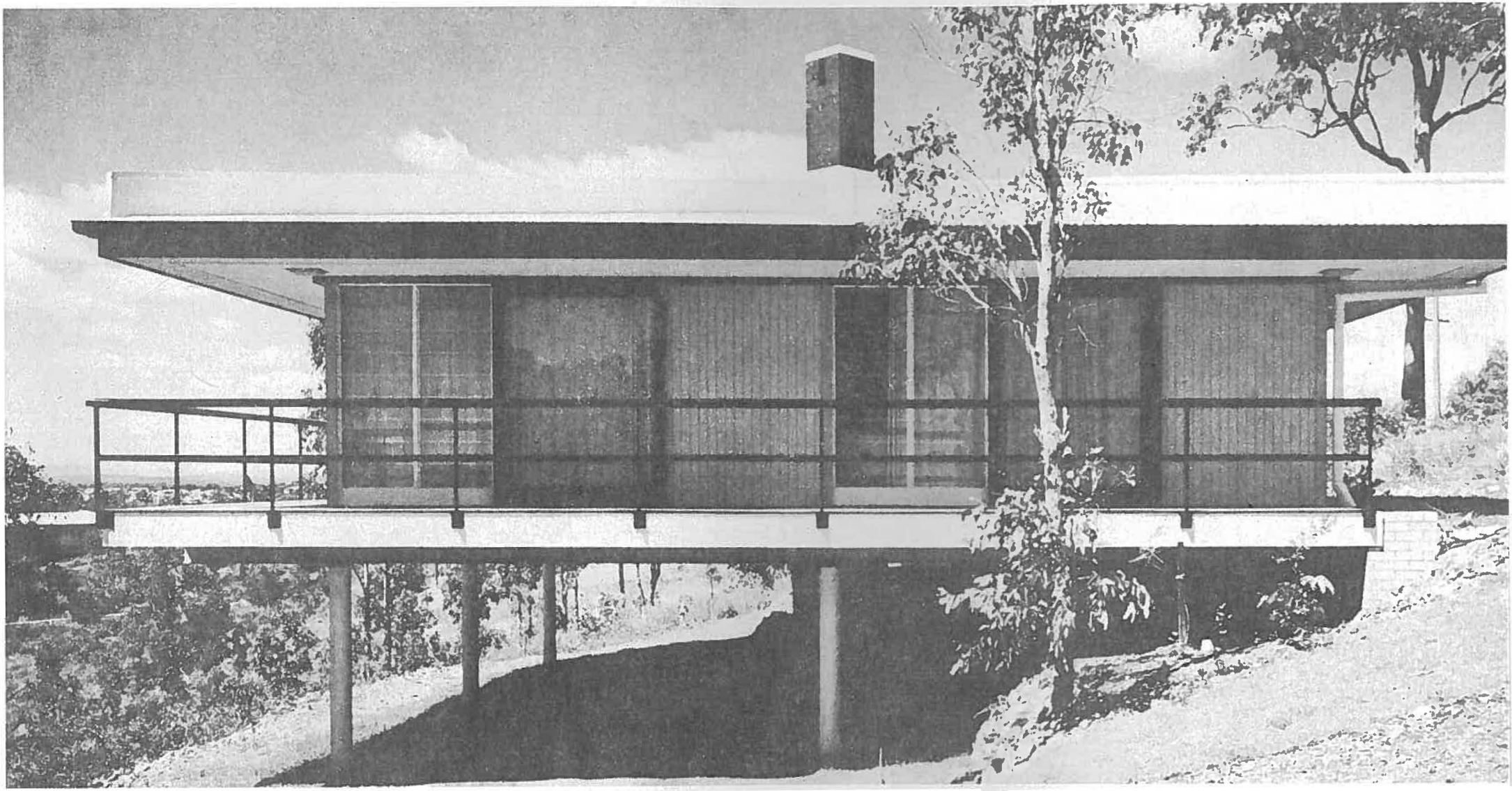


was a valuable way of learning and often eclipsed the training received at university or college.

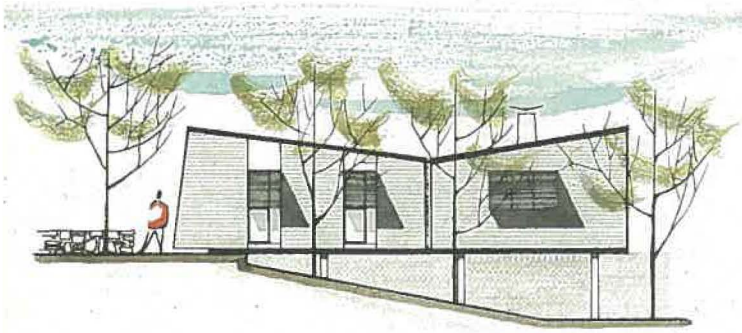
In 1959, the Queensland Chapter of the Royal Australian Institute of Architects (RAIA) published a book entitled *"Buildings of Queensland"*, commemorating the centenary of the State: The book contained a section on housing, and included houses from colonial examples to contemporary works of the 1950s. It provided an excellent overview of fifties houses and the work of important firms of that era. The 'traditional' houses featured had been designed by established architects such as Lucas & Cummings, E.P. Trewern and Charles Fulton. Progressive houses which shared characteristics of the International Style were by more recently established firms such as Hayes & Scott, Theo Thynne & Associates, V. Gzell and Dalton & Heathwood. The consensus amongst the architects interviewed was that the two most progressive firms during the 1950s in Brisbane were Hayes & Scott and Theo Thynne & Associates. These two firms were renowned for their innovative houses and recognised by architecture students of the time as being the practices in which to gain the best experience. John Dalton described working for Hayes & Scott as: *"The absolute pinnacle of a student's training... I could see they (the students) were getting wonderful training. You spent all your time running around Hayes and Scott's buildings, fascinated by how it all worked out – drawing board to reality. Cam Scott was an inspirational person in my life".*[10]

As a student, Peter Heathwood was also enormously impressed by the houses of Hayes & Scott and described them as *"elementary simple".*[11] According to Don Winsen: *"...the place all the hot shots wanted to work, Hayes and Scott and Theo Thynne and Associates."*[12]

Graham Bligh described Hayes and Scott as, *"beacons Australia-wide at the time"*,[13] and acknowledged their influence as being very important to a lot of Queensland architects.



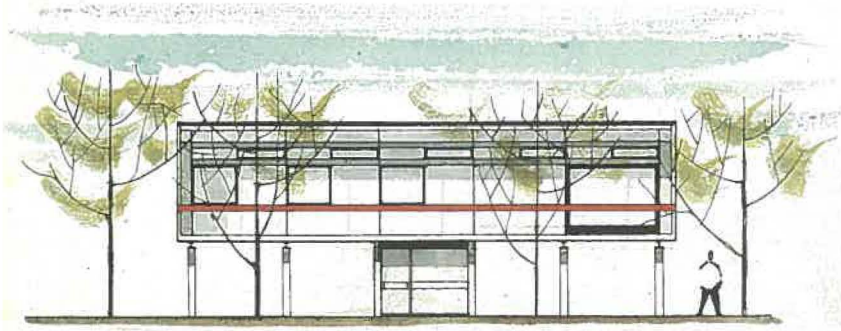
Jacobi House 1957
Hayes & Scott
RAIA "Buildings of Queensland"



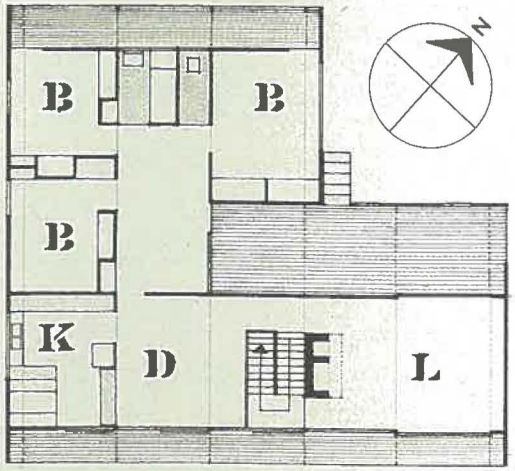
SOUTH-WEST ELEVATION

NORTH-WEST ELEVATION

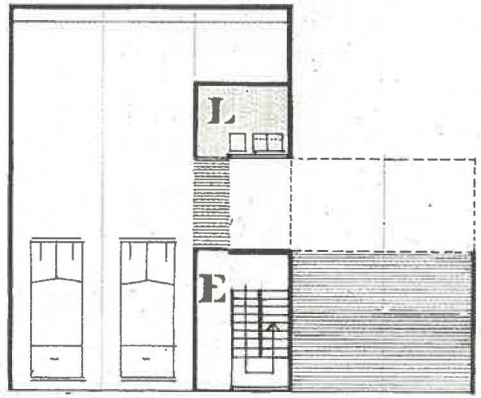
NORTH-EAST ELEVATION



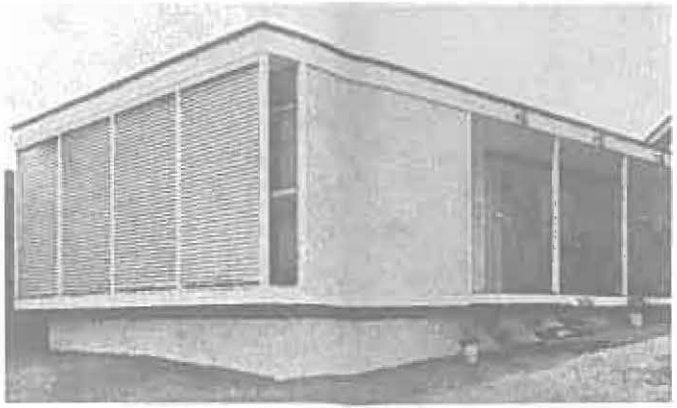
SOUTH-EAST ELEVATION



PLAN



GROUND FLOOR PLAN



Plywood House 1958
Peter Heathwood
RAIA "Buildings of Queensland"

The practice of Hayes & Scott was established by Edwin Hayes and Campbell Scott in 1946. Alice Hampson asserts they adopted the climatic principles of Karl Langer and were also influenced by the Californian and Brazilian architects. She contends that their work was motivated by economy, structure, colour and lifestyle.[14]

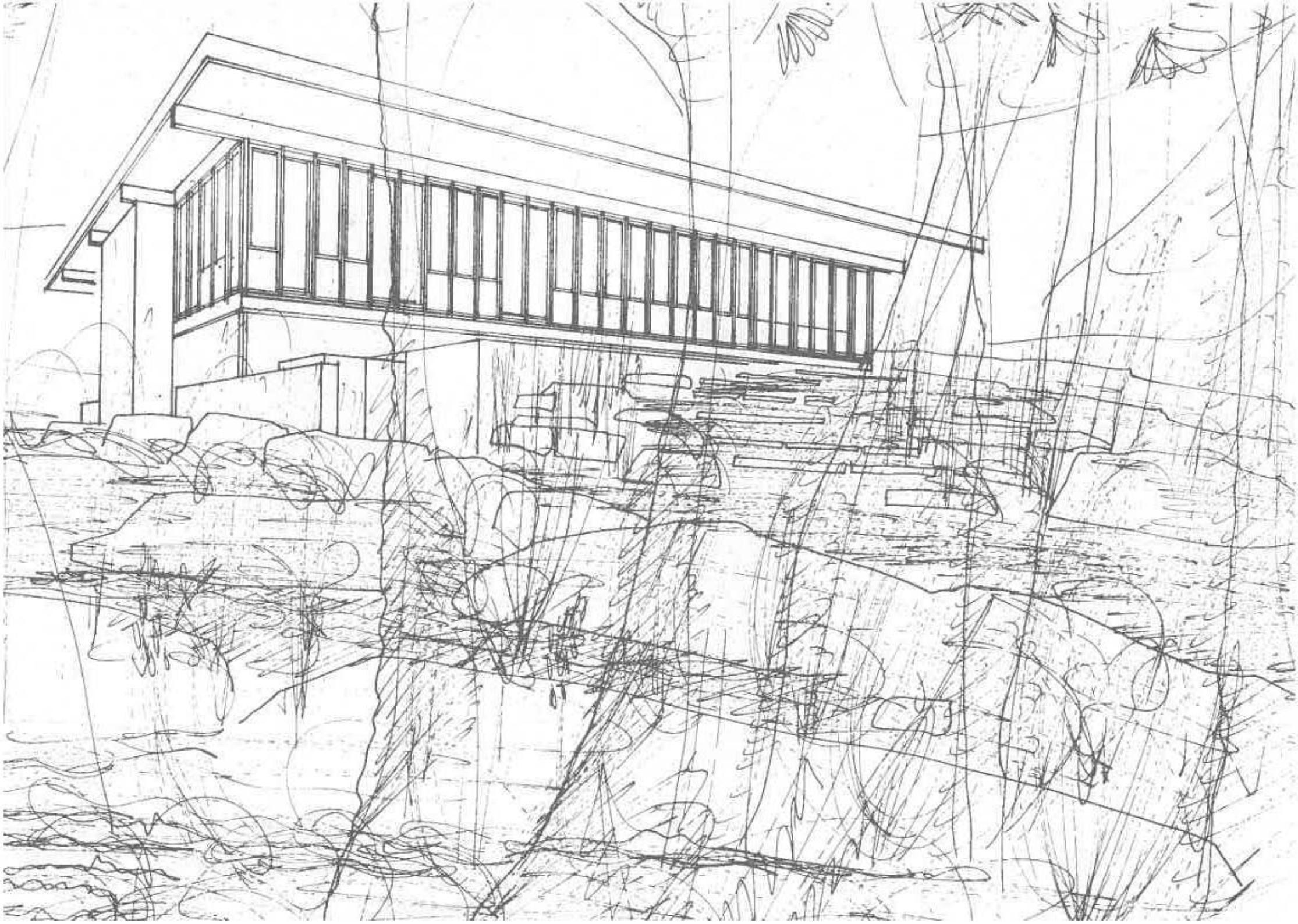
House 1950s
designed by Gibson, drawn by Dalton at Theo Thynne & Associates
collection of John Dalton

Theo Thynne entered private practice in the fifties, at first with John Hitch, and then on his own. Don Winsen became chief designer in 1952, after being granted associate status, while Theo Thynne was the administrator of the practice.[15] Robin Gibson joined the firm in 1953 and made a large contribution as a designer. Don Winsen was cited as an important influence by several sixties architects including John Dalton, Peter Heathwood and Geoffrey Pie. Robin Gibson was also mentioned as being influential by John Dalton. Don Winsen claims the major influences on his work, while working for Theo Thynne, were the Europeans – Walter Gropius, Ludwig Mies Van der Rohe and Marcel Breuer.[16] This is in contrast to the American influences evident in the work of Hayes & Scott.

Don Winsen and Robin Gibson made a significant contribution in the design of houses attributed to Theo Thynne & Associates in *"Buildings of Queensland"*. This was verified by Hampson during the course of her research.[17] The early work of John Dalton and Peter Heathwood, carried out while they were still students, was also included in this publication. Heathwood designed the "Plywood House" in the late 1950s for the Plywood House Competition. His design, with John Dalton preparing the working drawings while Heathwood was on his honeymoon, won the competition. The house was constructed and displayed at the exhibition and, after the exhibition was over, was moved to The Gap, a bushland suburb of Brisbane. Training is an important part in the life of an architect, and the diversity of experiences recounted by these architects undoubtedly shaped their later work of the 1960s. The variety of their international experiences and influences contributed to the local architectural expression. The importance of climate and the desire to respond to an international architectural scene were recurring themes, which evolved distinctively but subtly in each individual's work.

House 1956
Don Winsen & Robin Gibson at Theo Thynne & Associates
RAIA "Buildings of Queensland"

Coast House 1955
Don Winsen & Robin Gibson at Theo Thynne & Associates
RAIA "Buildings of Queensland"



The Sixties era

The design of the house in the sixties was influenced by various social factors including the way of life of the people who commissioned and lived in the house. Social changes included the increased prosperity of the nation after World War 2, the increase in the use of credit to buy material possessions and the widespread use of the car. There was a new emphasis on the relationship between the indoors and outdoors and having an entertaining area easily accessible from the living area. Developing technologies and new ways of using building materials also had an impact on house design.

Prosperity

Freeland stated: "*The general prosperity that continued without interruption during the fifties passed into all sections of the community. Every family and every individual shared in their country's affluence. This was largely due to another American practice – credit purchase.*"[18]

This prosperity continued into the sixties, along with a house-building boom in all major cities.[19] Low unemployment and a booming economy encouraged people to build better and bigger houses to replace ones built during the post-war building restrictions. It also encouraged them to buy more televisions, household appliances and cars.

The Car

The car allowed people to live in previously undeveloped areas of Brisbane not served by public transport and now accessible by car. Outer suburbs like Kenmore, Aspley and Sunnybank were opened up for house building. Increase in car ownership, with almost every family owning one, also affected house design. Before the war, the car – a rare and precious commodity, was usually housed in an enclosed, lockable garage set well away from the house. During the fifties and sixties, the car became more commonplace. It was usually accommodated in an open carport, integrated with the house and close to the street. Don Winsen remembered: *"I guess everybody preferred the open carports to the enclosed garages. I would say that was one area where function was considered far less important than appearance. Although in those days security wasn't a problem. It was absolutely necessary that they (the carport) should be an adjunct to the house. Also to make sure the car didn't take over too much of the garden and that it was as close to the street as possible".*[20]

Outdoor Living

During the sixties, the popularity of outdoor living areas for relaxing and entertaining friends increased and the use of paved terraces and pergolas opening from living areas became more common. The majority of architect-designed houses in Brisbane, published during the sixties, had a terrace, courtyard or verandah opening from the living room. The popularity of the outdoor living area was influenced by Brisbane's sub-tropical climate and a move towards informal entertaining.

The influence of the Japanese house, with its relationship between the interior and the landscape also had an impact. The article, *"Japanese Houses for Australia?"* was published in *Architecture and Arts* in January 1961. It asserted that the biggest "style trend" of the moment was Japanese design, and that certain attributes of the Japanese house should be incorporated into Australian houses. These attributes included the modular building pattern, the open plan and the indoor outdoor relationship. Freeland also mentioned the influence of Japanese

Frost House 1965
Maurice Hurst at Lund Hutton Newell Black & Paulsen
The University of Queensland Library, Fryer Library,
Lund Hutton Ryan Morton collection, UQFL211, Job No. 2610

Roessler House 1967
David Roessler
"Architecture in Australia" Feb 1967
see Plan on page 44

housing on the Australian house, and its simplicity and honesty of construction, materials and forms.[21]

The O'Neill house, designed by Graham Bligh in the early 1960s, appeared to reveal a Japanese influence. However when interviewed, Bligh contended that the house was not intended to have a Japanese flavour. He said that elements common in both Japanese and Queensland houses, such as verandahs, lightweight construction and the house being elevated off the ground, contributed to the perceived similarities between the architecture of the two cultures.[22]

The new methods of relating the interior to the outdoors were different to the relationship between the traditional Queensland house and its setting. Although the traditional house opened onto verandahs from its living areas and sometimes the bedrooms, it was divorced from its setting by being high-set on stumps. Suburban gardens traditionally had a manicured and cultivated appearance, dominated by fruit trees and large areas of short grass. During the sixties it was desirable for the outdoor living space to relate both to the interior areas and the surrounding landscape, especially in the bushier surroundings of the developing outer suburbs. This led to low-set houses with slab-on-ground concrete floors. Maurice Hurst said: *"I well recall that during the period 1959 to 1966, most clients insisted on a minimum of steps. In many ways they were over-reacting against the traditional Queensland house. Many of them hated the steps that led up to the front door and usually down from the back door to the yard and the garbage cans in their traditional houses. In nearly every instance clients requested that they were close to the ground and to eliminate steps where possible".*[23]

As a result of this, almost all of Hurst's sixties houses were low-set on a concrete slab. He often would cut and fill the site to create sheltered courtyards for family living areas.

Lifestyle

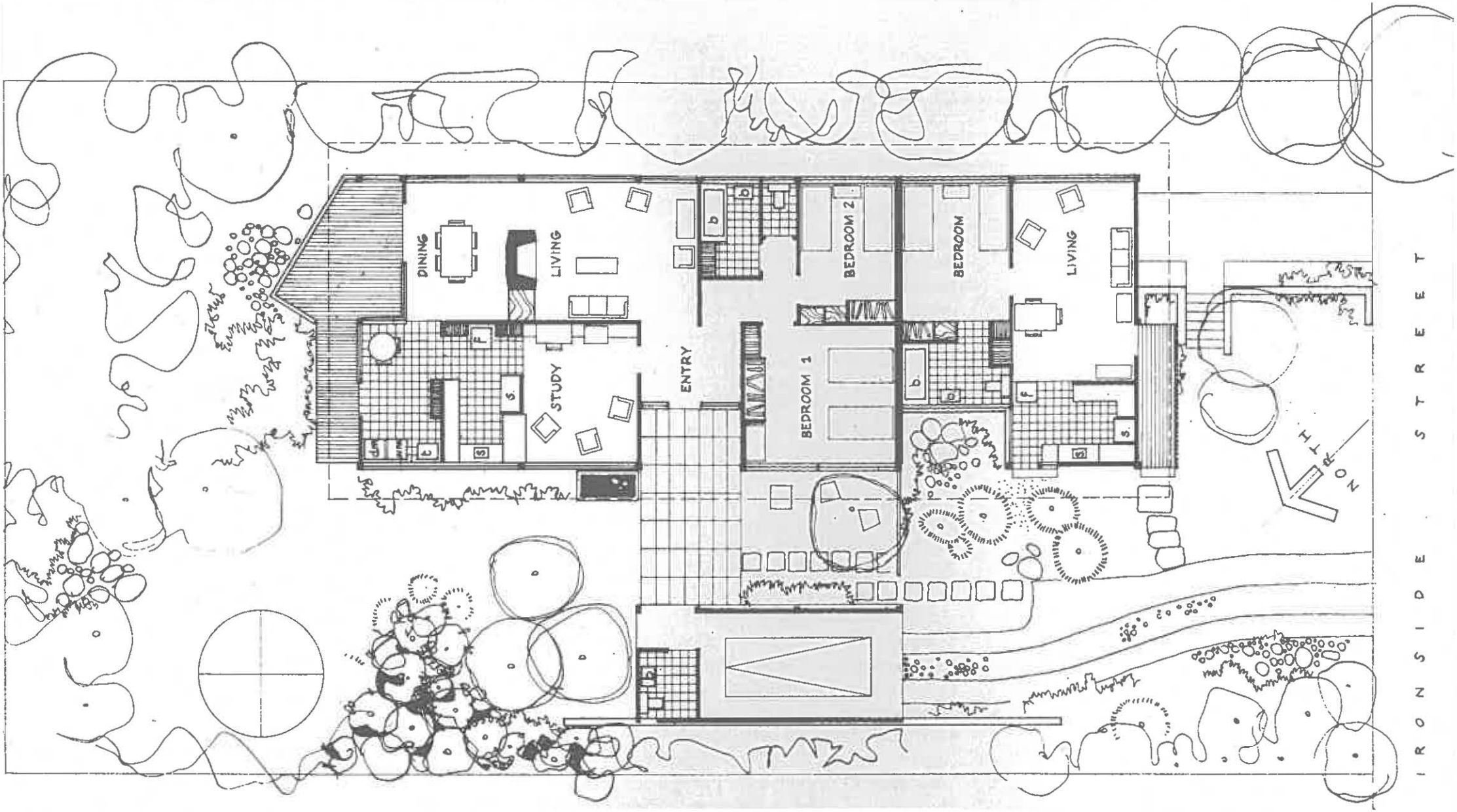
The way the client wanted to live in the proposed house was an important factor cited by many architects. When asked what their guiding philosophy behind a certain house design was, several architects said that it was the client's lifestyle. Don Winsen said it was important to discover the lifestyle of the client and to design a house to fit that lifestyle. Robin Gibson also said he started with the lifestyle of the client in mind. He likened it to putting an umbrella over their lifestyle and said: *"...what you were technically doing was enhancing their lifestyle with a graphical composition in the placement of walls and the joy of walking into space and bursting out into spaces, that is what it really is all about".*[24]

Maurice Hurst also said he designed each of his sixties houses to suit the client. Taylor said that Hurst was an "eclectic" who adapted his style to suit the preferences of the client.[25] Hurst put it this way: *"As with an actor who becomes the part and studies the character, I have always endeavoured to become the client– as a character. From the early meetings the character of the client can be felt and in the process of design I try to see the building through the client's eyes".*[26]

Geoffrey Pie also said that the ability to think from the client's point of view is very important and asserted that the architect must be totally sympathetic to the client. He said: *"You must get to understand what people really want, listen to people – to allow a client to express how they feel... It's really important to bring people out because when they live in that house, they actually are really part of that house".*[27]

David Roessler designed Roessler House for his aunts, two single women, to suit their lifestyle. He said that he based the design on the Goetsch-Winkler house by Frank Lloyd Wright. John Railton, a colleague, prepared the working drawings and designed all of the furniture. The house faced north and the view, with the courtyard

O'Neill House 1964
Graham Bligh of Bligh Jessup Bretnall & Partners
"Cross Section" No.142 Aug 1964



O'Neill House 1964
Graham Bligh at Bligh Jessup Bretnall & Partners
"Architecture in Australia" June 1965

Frost House 1965
Maurice Hurst at Lund Hutton Newell Black & Paulsen
collection of Maurice Hurst's estate

providing shelter from cold winds at the rear. A modular window system was used and the house was lowset on a concrete slab.

Materials

New ways of using existing building materials had an impact on the design of the sixties house. Steve Trotter recalled utilizing a rolled steel sheet material by Stramit, usually used for concrete formwork, as a roofing material. It was the only sheet metal available at the time in 30 metre lengths, thus enabling a flat roof to span greater distances. He used to specify it as concrete formwork turned upside-down for roof sheeting.

Trotter also pointed out that the bulldozer and the batching of concrete were instrumental in the proliferation of slab-on-ground housing. He remembered American disposal bulldozers after the war being used by Theiss Brothers to excavate sites. Before this, most excavation was done by hand. He said that the batching of concrete, being brought onto the site by mixer trucks, and the use of modular formwork, led to the increase of slab-on-ground houses.[28]

Maurice Hurst commented on the slab-on-ground house:

"Nearly all these houses (of the sixties) had such a planned form (slab-on-ground) and I suppose in some ways you could say it might have been a fashionable use of a bulldozer. On the other hand, it appeared to me to be a matter of economics and I doubt that an elevated house would have had any advantages over this cut and fill operation, depending on slope and ecological characteristics".[29]

The modular window system, designed by Robin Boyd in the fifties for Stegbar, had a large influence on the fenestration of the sixties house. Most of the architects interviewed mentioned this system and had used it in their houses. Maurice Hurst based a series of houses around the system and incorporated different types of windows, doors, and opening panels into it.

He said: *"My continual interest in the form of the houses and the refinement of the glazing and ventilation systems seemed to dominate my design attitude".*[30]

He used a modular system of walling based on the Stegbar frame that permitted a variety of functions. The object was to limit the extent of external glazing and subsequent heat transfer and maximize the air flow through the house. The system incorporated:

- Solid fixed panels
- Glazing
- Opening louvres
- Casements
- Solid opening panels
- Sliding or side-hung doors

This system was progressively developed in Hurst's houses of the sixties period, culminating in the Frost House, where all of the exterior walls consisted of this system.[31]

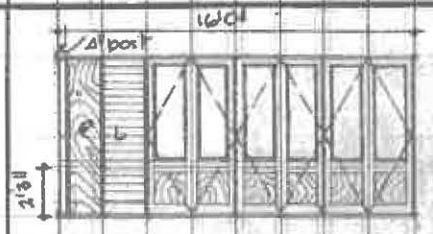
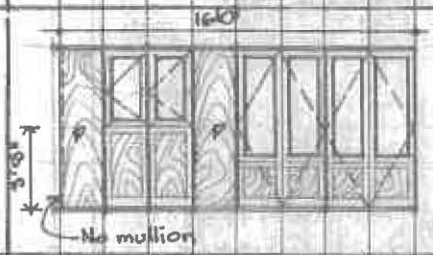
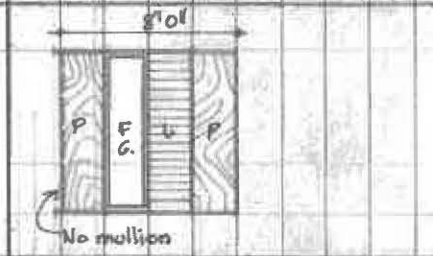
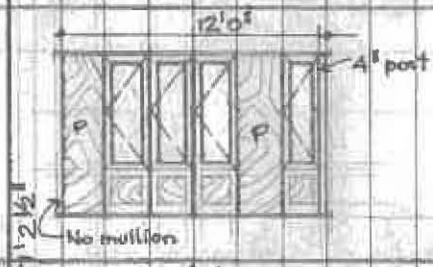
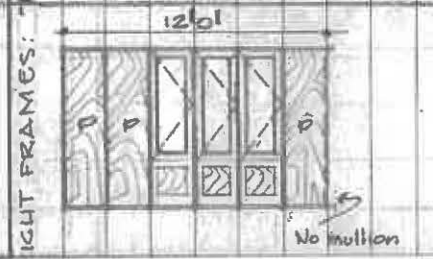
Steve Trotter recalled that the introduction of aluminium windows in the late fifties and early sixties, was a major revolution. John Dalton incorporated frameless sliding glass windows in many of his projects. These various window systems had an effect on the appearance of the sixties house.

A number of factors including the contemporary lifestyle, the car, and new methods of using existing building materials and technology, helped shape the design of the sixties house and contributed to a regional architectural expression.

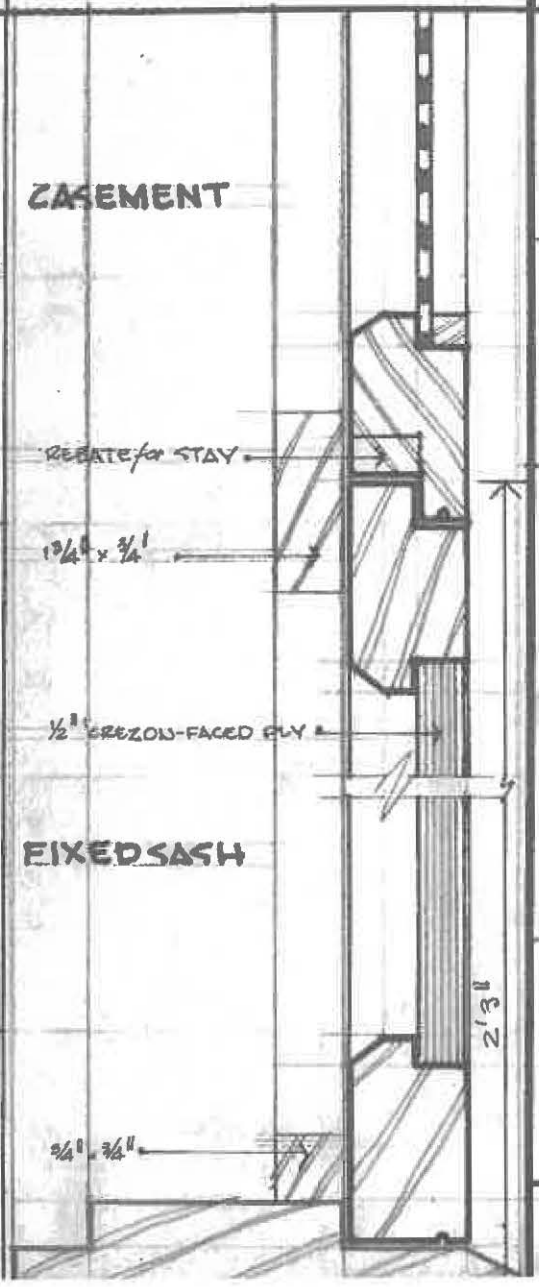
Frost House 1965
Maurice Hurst at Lund Hutton Newell Black & Paulsen
The University of Queensland Library, Fryer Library,
Lund Hutton Ryan Morton collection, UQFL211, Job No. 2610

EXTERNAL DOOR & WINDOW SCHEDULE

A

TYPE	DESCRIPTION	SIZE	BUTTS	FURNITURE	REMARKS
1. 10		7'2½" × 15'8" O.A. frame; 3 pair 32 oz. glazed doors; Naco 4" louvres, (dual control); for fixed panel see note 4 under 'Remarks'. (10) is (1) reversed	4" steel	As selected by client & architect on site; allow P.C. sum.	
2		7'2½" × 16'0" O.A. frame;	4" steel	do.	
3		7'2½" × 8'0" O.A.; fixed glass to be determined by architect (after style of Vitrolite but translucent) louvre glass similar		do	
4 7		7'2½" × 11'8" O.A. (7) is (4) reversed		do	
8		7'2½" × 12'0" O.A.		do.	

LIGHT FRAMES: 7'2½"



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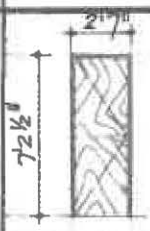
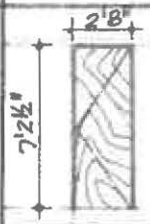
13	
14 15 17	
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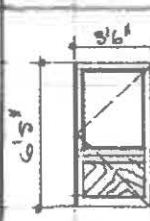
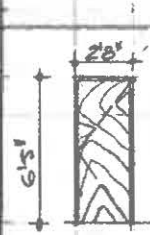
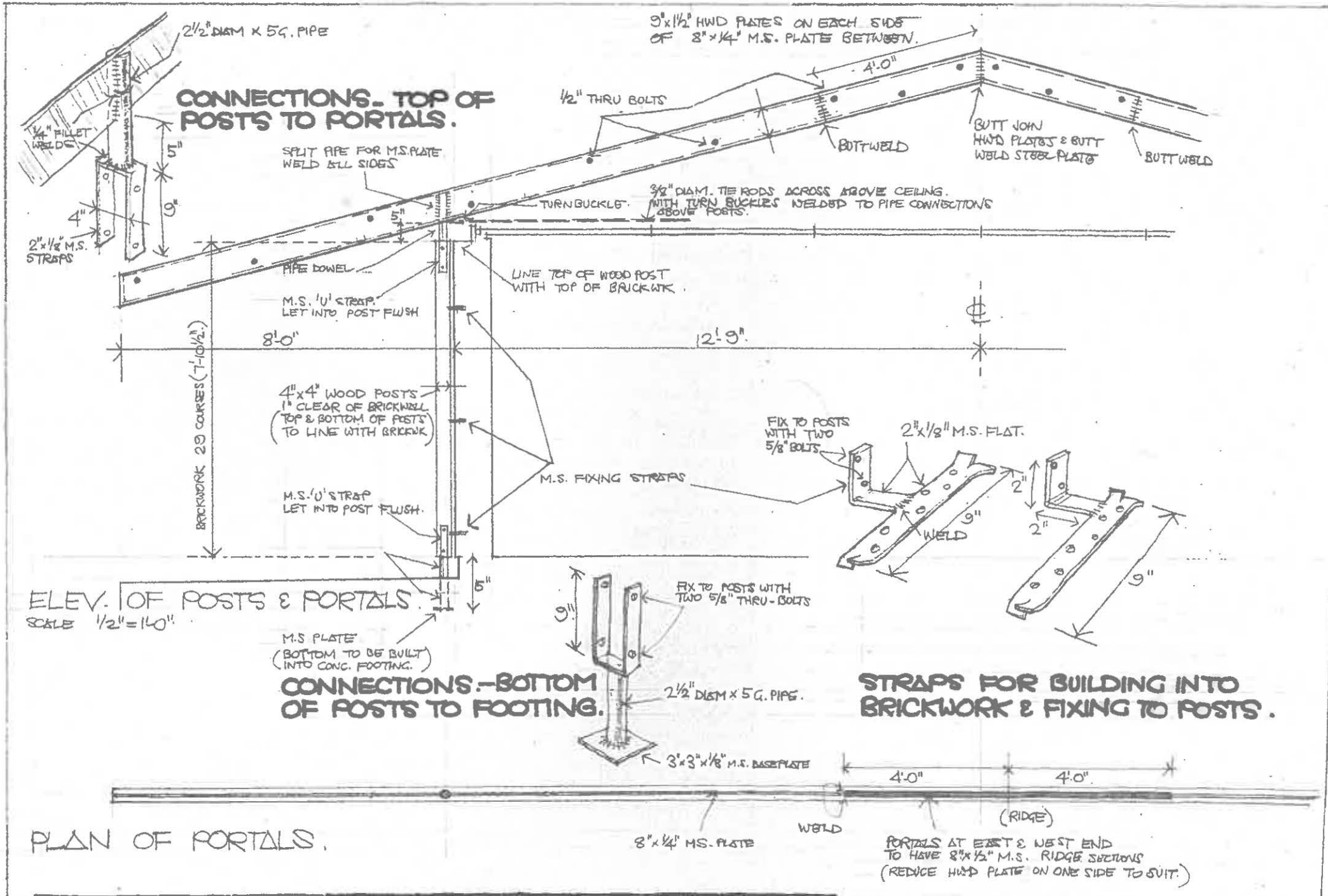
18	
19	



CONNECTIONS. TOP OF POSTS TO PORTALS.

STRAPS FOR BUILDING INTO BRICKWORK & FIXING TO POSTS.

CONNECTIONS.-BOTTOM OF POSTS TO FOOTING.

ELEV. OF POSTS & PORTALS.
SCALE 1/2"=1'0"

PLAN OF PORTALS.

PORTALS AT EAST & WEST END TO HAVE 8"x½" M.S. RIDGE SECTIONS (REDUCE HWD PLATE ON ONE SIDE TO SUIT.)

DETAILS OF ROOF PORTALS.
SCALE 1/2"=1'0" C.T. APRIL 62

HOUSE FOR N.R.SCHAFER.

FULTON & COLLIN & PARTNERS
ARCHITECTS 99 ASTOR TCE
BRISBANE PHONE 23012

4-867

Climate

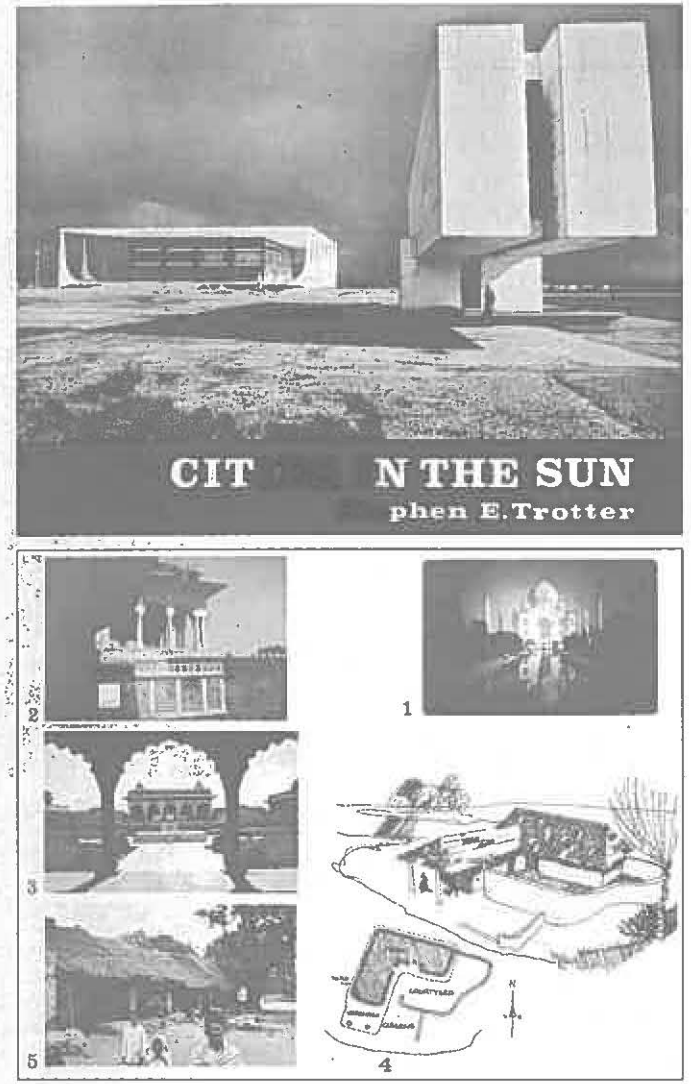
In 1977 John Dalton claimed: *"Design for climate is the simple solution for all our architectural endeavour in Queensland. It is the mainspring for all the magical qualities that add up to a vital architecture. ...Our delight is to build in the sun and gather our poetic inspiration from the sunlight, shade and shadow that is our heritage".*[32]
For the architects interviewed for this study, one theme was common to them all – designing for the Queensland climate. While there were differences in the approach taken by each architect, climate was considered basic to the design process, and was expressed in the desire to create a liveable, comfortable building. In Brisbane's sub-tropical climate, it was important to design a house that could be kept cool by admitting breezes and by shading the house from the hot summer sun.

Studies in Climatic Design

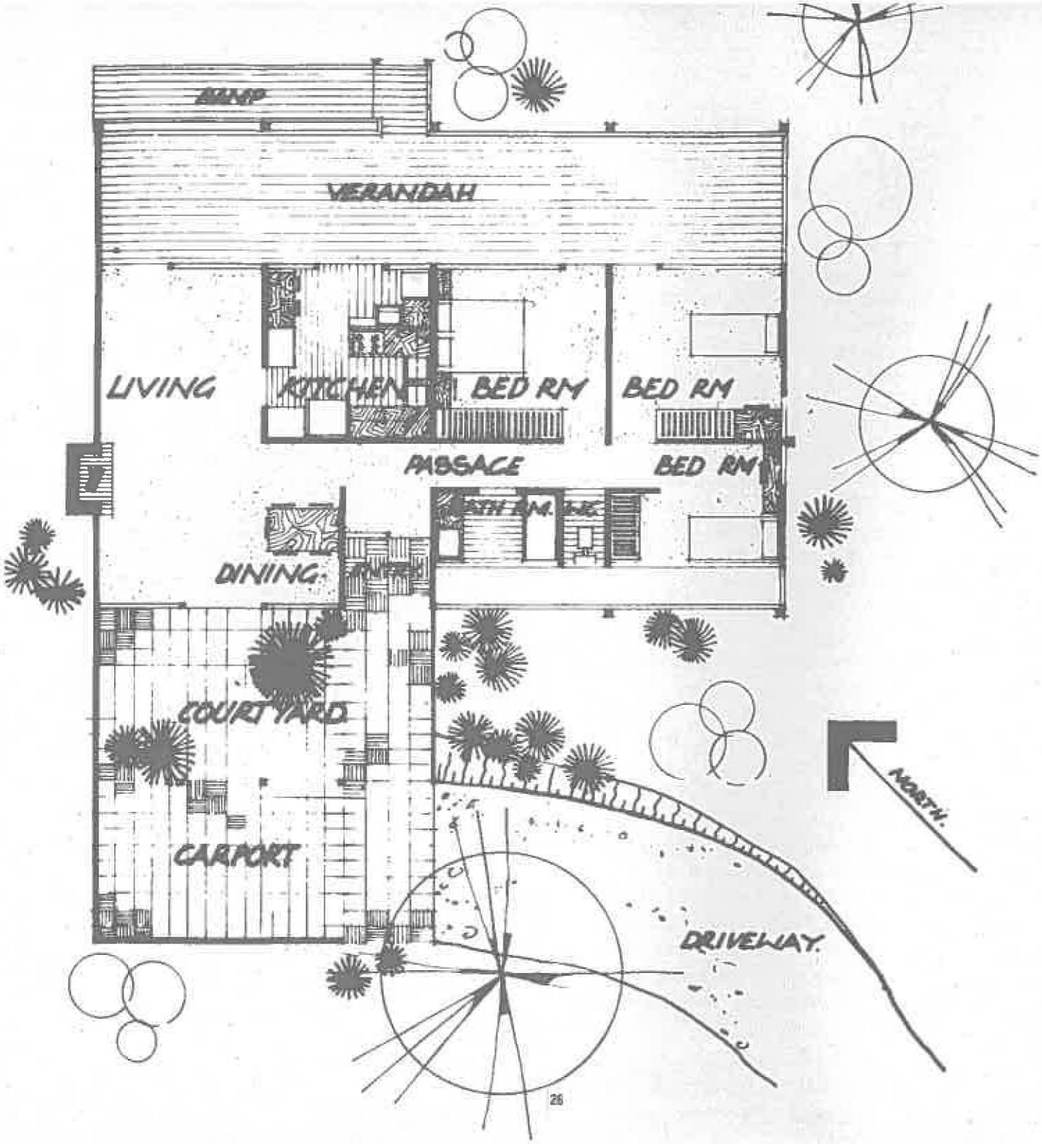
A paper published by Karl Langer of the University of Queensland in 1944 was a forerunner to local literature on climatic design. [33] Titled *"Sub-tropical housing"* it discussed both house design and town planning principles. According to Langer, the essentials in the design of a sub-tropical house were the avoidance of fatigue and glare and provision of light and economy.
Langer also recommended climatic control design elements such as carefully designed overhangs, cross-ventilation and correct orientation,using sun charts to make the calculations. Not only was the individual house considered, but the whole suburb was addressed, and examples of block and suburb layouts given as examples. Interestingly, most of the architects who were interviewed had Karl Langer as a lecturer at university, but remember him as an expert on town planning and not climatic design.

Schafer House 1962
Steve Trotter at Fulton Collin & Partners
Trotter Moss & Partners archive

Climatic design was an emerging field of study during the early sixties. In 1963, the Sisalkraft Research Scholarship, a national prize given by the Royal Australian Institute of Architects to encourage ground-breaking research in the field of architecture, was awarded to Brisbane architect Steve Trotter. His project was to research climatic design and he embarked on a world tour, taking in the countries of Malaysia, India, Persia, Greece, Italy, Spain, Portugal, Florida and Hawaii in the U.S.A, and Brasilia and Rio de Janeiro in South America.[34] This research was considered so important that instead of the usual report, a book was produced, titled *"Cities in the Sun"*. Trotter examined the vernacular building practices of the countries visited and found that primitive societies built structures that were ideally suited to the climate. In the book's conclusion, Trotter called for a greater communication of ideas on climatic design, noting that: *"Very little has been written on the physical, historical and psychological aspects of tropical design by architects brought up in tropical environments. Most work in this field has been carried out by European born and trained architects carrying out commissions in tropical regions".*[35]
Trotter emphasized that northern Australia needed to find its own solutions for the design of buildings sensitive to the climate. He asserted that even though Australia did not have centuries of suitable vernacular buildings to draw upon, we should not look to unsuitable northern European prototypes as a solution.
Trotter acknowledged the importance of understanding the climate in his own work: *"The strength in my practice has always been every building I've done is related to the climate. ...My philosophy is that all buildings grow out of climate, house building in particular; all buildings I believe do, but house building in particular. If you live outside, its lovely to live outside, the weather is beautiful; it must express itself in your buildings".*[36]



Cities in the Sun by Stephen Trotter, 1964



Sturgess House 1967
Peter Heathwood
"Architecture in Australia" June 1967
Plan *left*

Trotter's own house, built in 1954, featured verandahs on the northern side, recessed to stop the westerly winds and designed so that the sun would come across the verandah in winter but be clear of the verandah in summer. He also incorporated glass at the bottom of the windows so the sun could heat the floor of the house in winter. Trotter said he continued to use these, and other, climatic design principles in all of his buildings.

The Schafer House, designed by Trotter in 1962, although very simple in plan, utilized one of the first parasol roofs in Brisbane. The roof was isolated structurally and spatially from the interior of the house and was open to allow air to flow through the roof space to cool the house.[37]

In considering the work of architects during the sixties, climatic design is particularly noticeable as the central theme to the work of John Dalton. He said: *"If somebody backs me into a corner and says, 'What do you stand for?' when you've seen all the other parades of art and cultures and things, I say I'm still for design for climate because it works! The rest comes and goes, it's a chimera, it doesn't hang around all the time".*[38]

Dalton acknowledged the influence of his friendship with Balwant Saini who was working in the Tropical Architecture section at the University of Melbourne in the early sixties and also the influential teaching he received on climatic design from Bruce Lucas at the University of Queensland. He remembers having to work out sun angles using protractors in Lucas's class, which he continued to do during his years in practice: *"Critiques of design for climate would say "A couple of flyscreens and a couple of large overhangs don't make design for climate!". Well, we used to sit with our protractors working out the angle of the sun penetration".*[39]

Dalton advocated open planning of houses in order to maximise cross ventilation. Large roof overhangs and shading to the walls were also utilised, along with the use of a light frame structure.

Some other devices he used included:

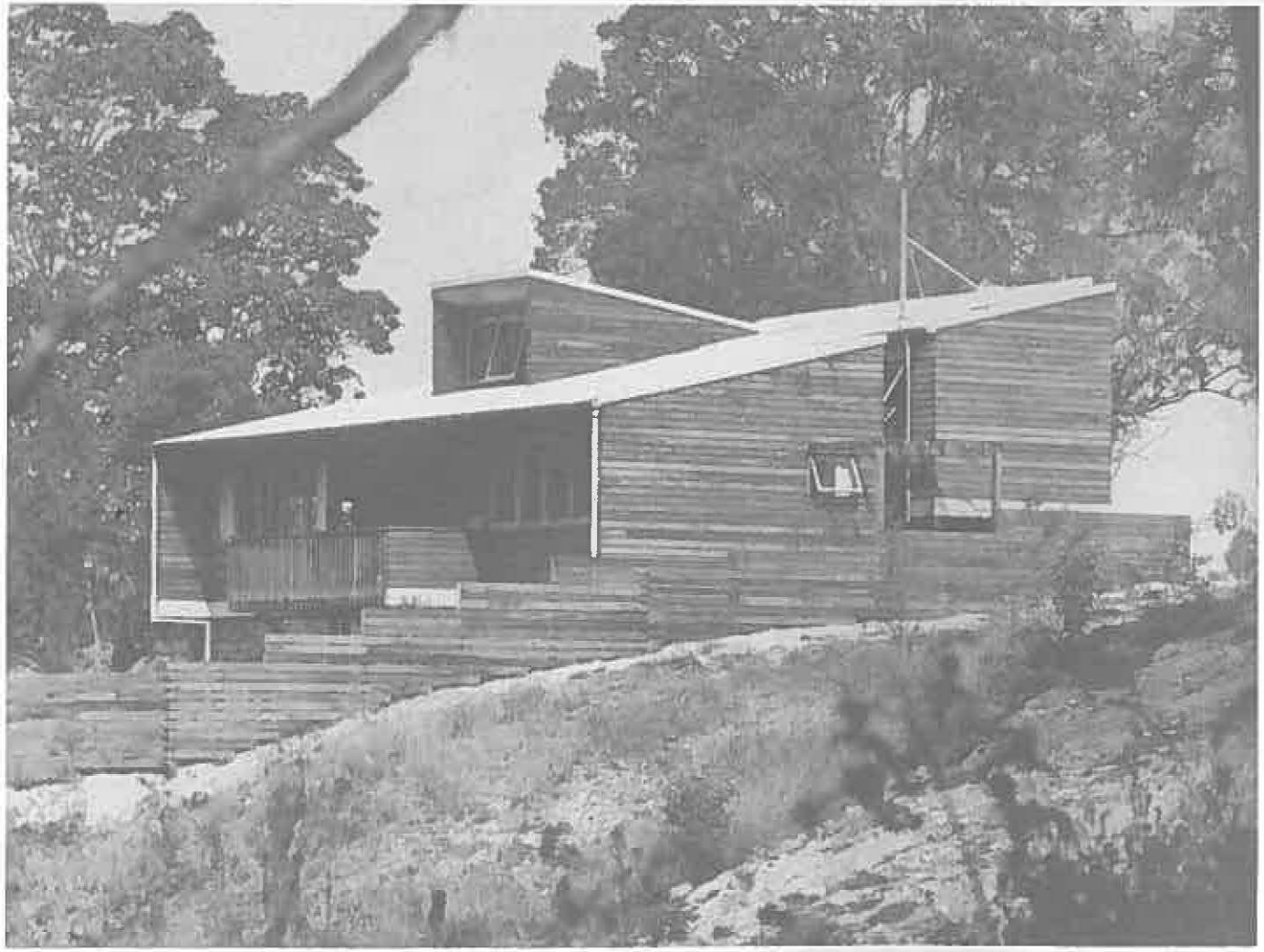
- Sun blades and adjustable sun louvres to pergolas
- Floor to ceiling openings on the northern side to allow entry of breezes
- North-facing terraces and verandahs
- The linear floor plan with maximum northern orientation
- Louvred timber doors
- Internal breezeways
- Horizontal louvres and lattice

Dalton's own house, designed in 1960, used the following climatic design elements. The plan allowed all major rooms to face the north-east, with the bathroom and laundry being the only rooms opening to the south. Over the central kitchen, a roof clerestory evacuated warm air from the cooking area and created a constant breeze at the centre of the house. At the eaves, a continuous aluminium grille, running the whole length of the house, kept air moving through the roof space. The living room eastern wall folded away so that the room could open onto the verandah, and below the window sills, opaque glass floor vents opened to allow floor to ceiling ventilation.[40]

When talking about the design for the Speare House, Peter Heathwood said, that because the site received very few cooling breezes, an effort was made to maximise cross-ventilation. Although the house appeared to have a flat roof, the ceilings sloped upward towards a central clerestory to vent hot air out of the house. He recalled: *"You could sit in the lounge and watch the (cigarette) smoke go up, so it works!"*[41]

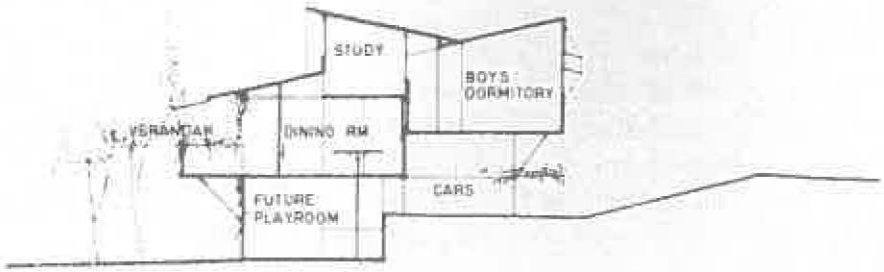
Heathwood also utilized distinctive lattice panels on the exterior to filter out sun and glare. In a later house, the Sturgess Residence (1967), he incorporated glazed, louvred walls for maximum cross-ventilation, with the whole northern side of the house opening up to the verandah.[42] Referring to climate, architect

Dalton House 1960
John Dalton
photos Geoff Dauth
Blueprint *on page 10*



photograph: David Knell

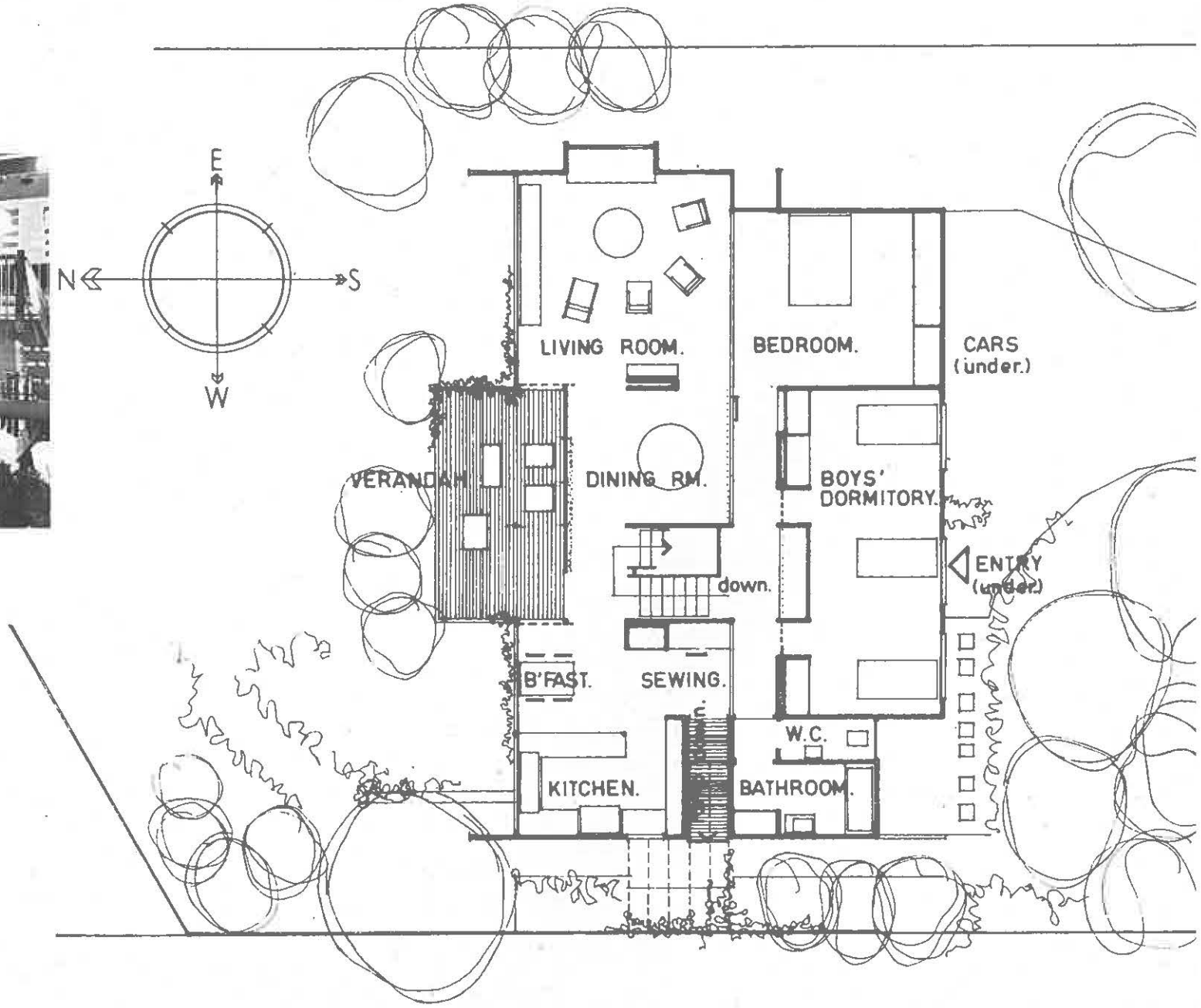
Structure
Material and method: timber frame, Spotted Gum
External walls: Copper Chromate treated weatherboards of Spotted Gum, unpainted
Roof: asbestos cement
Windows: Western Red Cedar sashes and louvres
Finishes
Walls: natural dressed Spotted Gum
Floors: Crows Ash, sealed
Ceilings: natural cane fibreboard



Geoffrey Pie said of his work: *"But I've always been a fanatic about climate anyway ... one of the most important things is to do a lot of camping. Then you become in tune with the climate".*[43]
In the Pie Residence (1966) designed for his mother, Pie used a concrete roof with a layer of fibro on top to lessen the heat gain into the house. Other climatic design features were wide roof overhangs to shade the large areas of glass, and shading to east and west walls.
Graham Bligh also acknowledged the importance of camping in getting to intimately know the Queensland climate and the indoor/outdoor living style that is so suitable. His own house, published in 1969, consisted of a series of open-plan levels, all of which had a northern aspect. This allowed total cross-ventilation during the summer months and, combined with wide overhangs, kept the house very cool. Bligh says the house worked well for the family and was still living in it more than 30 years after it was built.[44]
It can be seen that climatic design was important in the architectural design of houses in the sixties and was a driving force in the work of Dalton and Trotter especially.
There was an emerging interest in this field during the fifties and sixties, which was expressed in the experimental design features of many of the houses.

Bligh House 1969
Graham Bligh
"Architecture in Australia" Aug 1969

Bligh House 1969
Graham Bligh
"Architecture in Australia" Aug 1969



International influences
The modern ethos

It is important to establish a broader architectural context for the houses of the sixties in order to fully understand their significance. By 1960, the International or Modern style was considered to be the current progressive style within Australia. It had gained recognition and acceptance later in Australia than in the rest of the world, becoming generally accepted by the architectural profession after World War Two. As Apperly stated: *"Unexpectedly large numbers of returned service-men had flooded Australian schools of architecture from about 1946, and most of them entered the profession in the early 1950s as ardent modernists, determined to help make a better world by applying their cherished theories of 'rational' and 'functional' design to everything from cities to cutlery".*[45]

Maurice Hurst completed his architectural training in England after the war and recalled that architecture students, and particularly returned servicemen, were searching for a social basis for architecture. He said: *"The notion that the architect had a social responsibility in rebuilding the country after the war was not in question. ...Housing was a social issue with the London County Council giving opportunities for the new architecture and its advocates to build the Welfare State".*[46]

Graham de Gruchy also worked for the London County Council before emigrating to Australia. His interest was in the social aspects of large-scale housing, such as multi-storey unit blocks and townhouses.

After coming to Brisbane, de Gruchy designed "Burrawood", a block of four flats in Toowong. Each flat contained a wide living room facing north with a flyscreened verandah.

Piesse flats 1964
Nevil Miller
collection of Nevil Miller

The building was constructed of whitewashed concrete blocks, featuring stained red cedar timber, with a simple skillion roof. He wanted the residents to be able to park their car and proceed up to the units on both sides – a very simple and straightforward design. De Gruchy also entered and won a competition for cluster housing in the late 1960s. His winning design, intended for a tight urban area, contained an internal central courtyard with each unit having its own private atrium.

Robin Boyd was a prolific writer and architectural critic during this period. He too was searching for a social basis for architecture. Brisbane architect David Roessler moved to Melbourne during his student days and finished his architecture degree at the University of Melbourne, graduating in 1962. He said his main influence at this time was Robin Boyd and he was delighted to have worked with him one summer while still a student. He described this experience: *"He (Boyd) had such an exciting attitude to architecture in the sense that he saw it in a social context, he saw design as something that had the potential to matter... He was funny about the foibles that were all around us and he really seemed to have the drop on what was happening and, as I say, he put it into a context. I thought he was great".*[47]

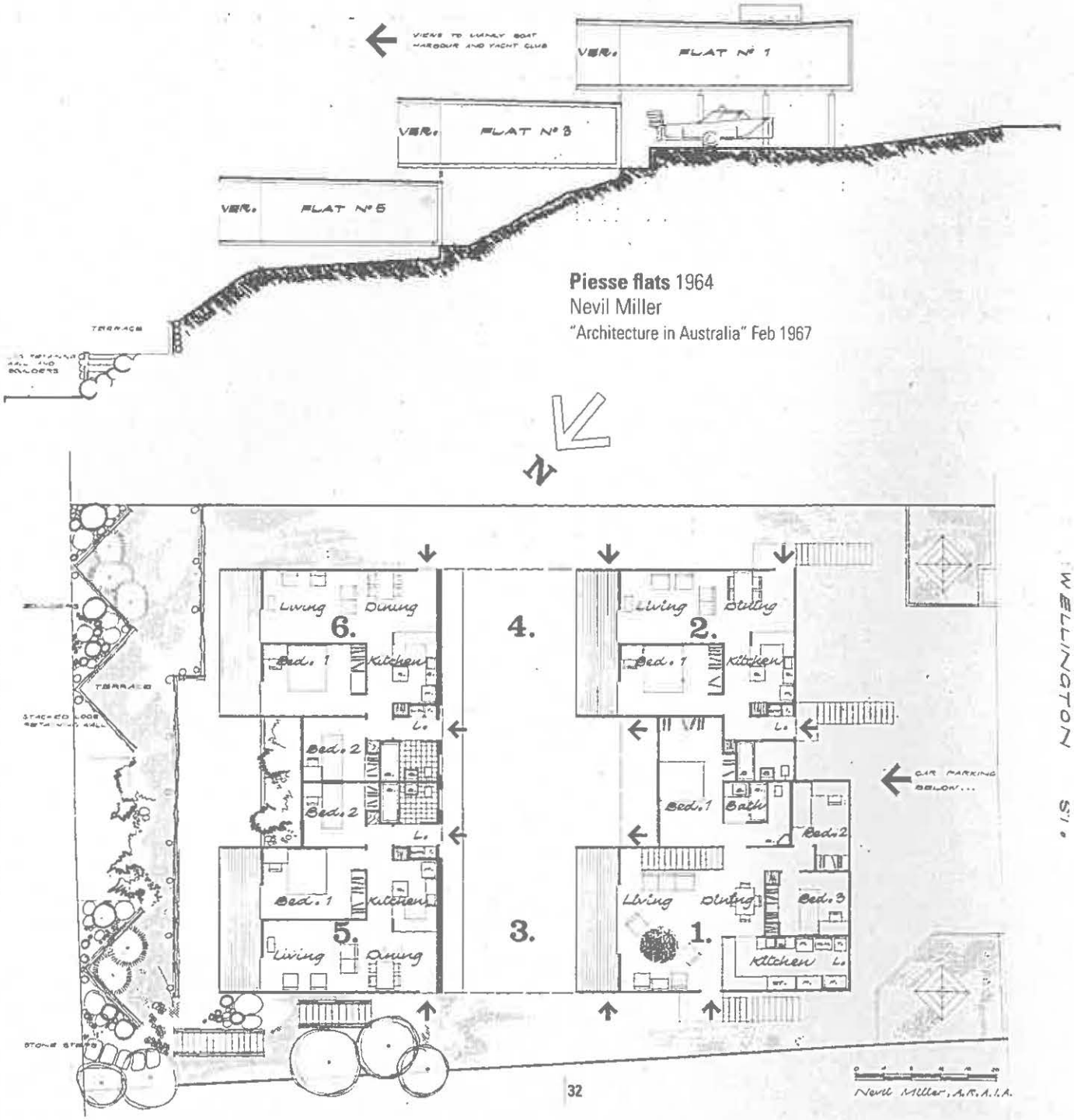
Boyd's *"The Puzzle of Architecture"*, published in 1965, described the "third wave" of architecture, which he contended began in the early years of the 60s, as the architecture for the future.

Boyd described it thus: *"By the term 'third phase', then, I mean only that after two predictable failures of twentieth-century architecture – first its marriage with the machine and then its search for significant form – at last it seemed to find its feet".*[48]

Boyd argued that this "third phase" began around 1960 and: *"...seeks to combine the functional freedom and the clear structural and spatial articulation of the first phase with the monumental artistic unity of the second".*[49]

Piesse flats 1964
Nevil Miller
photo Geoff Dauth
"Architecture in Australia" Feb 1967

photographs: Geoff Dauth



Piesse flats 1964
Nevil Miller
"Architecture in Australia" Feb 1967

This third phase was said to take the best aspects of functionalism and build upon this foundation by taking into account human needs.

Maurice Hurst remembered the reaction in the sixties against some of the more radical architectural designs of the fifties. There was a movement towards a more conservative and sensible architecture. When Hurst was designing a range of houses for a firm of merchant builders, he said: *"It seemed to me that the design and construction of the houses should be rationalized on a module basis rather than what appeared to me to be a strange mixture of timber framing, odd shaped plans and a mixture of all kinds of materials. The word 'featurism' was already the kiss of death to architects as Robin Boyd was then busy sweeping out the Edna Everages from the architectural scene".*[50]

Most of the architects interviewed acknowledged the influence that the International Style had on their work of the sixties. At the time, it was still an accepted architectural ethos and it was not until later that it was overtaken by other architectural ideas. Geoffrey Pie described one of his early houses, the Morrow house at New Farm, as "a Mies Van der Rohe Queenslander", adding that "Mies and Queensland buildings are soulmates". The house revealed the international influence in the long, low, simple lines and regulated planning.

Nevil Miller's work from the late 1960s also showed the influence of the International style. Piesse flats were located on an extremely steep site overlooking the harbour at Manly.

Miller described the way he approached the design: *"It was a very steep site – so that was its unique problem and the solution to that was to step it in three layers, each layer giving each unit direct access to ground level. The other feature about it was the beautiful view, so I accentuated that by framing the view for each particular unit".*[51]

Burrawood flats 1965–66
Graham de Gruchy
photo Richard Stringer

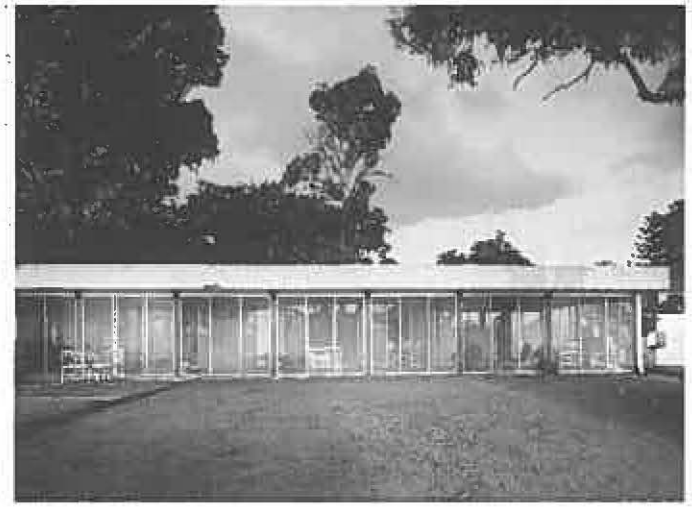
Graham de Gruchy inside Burrawood
collection of Graham de Gruchy

The house that Miller designed for Bob Mackerras, an engineer, was intended to express the structure both internally and externally. The house was conceived as consisting of roof and floor planes held up by posts and supported on beams. Miller said: *"Its hard to know where you get influences from, but to me it seemed to be an efficient way of joining roof and floor beams together to express a simple structure by the repetition of beams, twin posts and timber screens".*[52]

Robin Gibson admired the way that Mies Van der Rohe approached design saying that Mies: *"...abstracted stuff down to such a degree that you couldn't help but seek out why he was doing it, not what he was doing but why he was doing it...you would be trying to understand why something happened...it had nothing to do so much with style but with why it was being done that way".*[53]

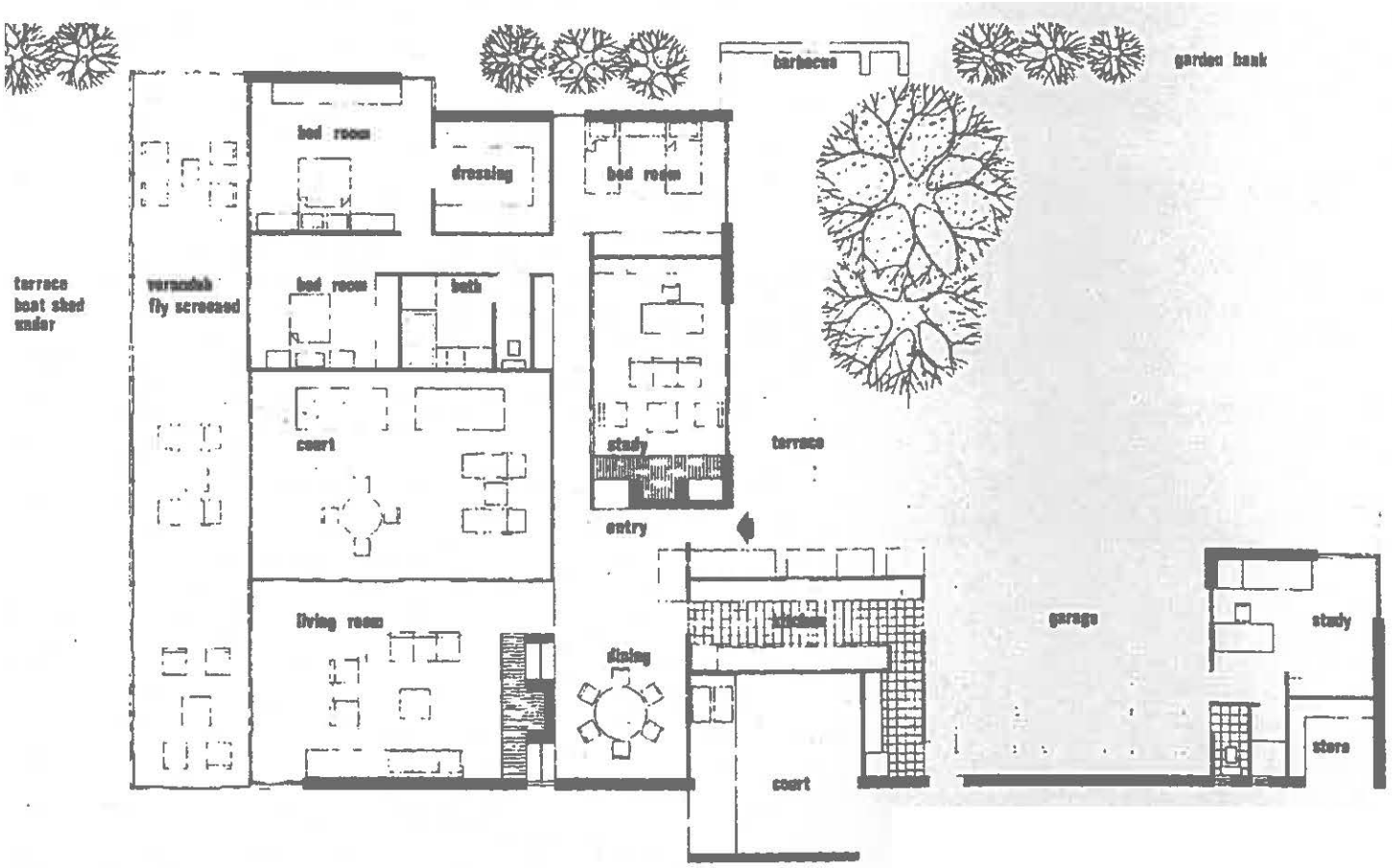
The Mocatta house was one of a series of courtyard houses Gibson designed during the 1960s. The house opened up to the north-east, with louvred doors that slid back to facilitate cross-ventilation. It was planned around an internal courtyard and a screened verandah provided views to the river.

While many of the architects were influenced by modern architecture, some also looked for inspiration in earlier buildings. Graham de Gruchy said: *"...As much as I admired things like the Barcelona Pavilion, I just eventually felt it wasn't expressive enough*



Mocatta House 1966
Robin Gibson
photo Richard Stringer

Plan *below*
"Centre Line" No.51 Oct/Nov 1966

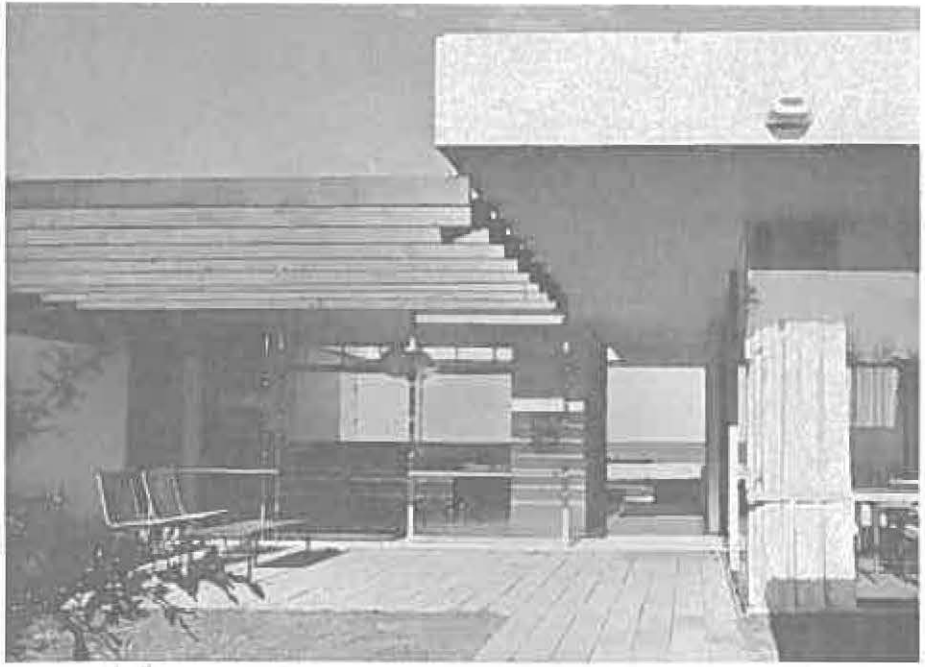


in terms of the possibilities that architecture offers. I mean once you've seen some of those Moorish palaces or for that matter some of the vaulted medieval stuff in France, you suddenly realize how limited the modern architectural perspective could be".[54]

The Modern Movement of the early twentieth century still dominated architectural thought during the sixties and had a great influence on these architects while they were students in the fifties. They seem to have been influenced more strongly by overseas architects rather than Australian architects, with the Europeans having a greater impact than the Americans. John Dalton summarized the architectural mood of the sixties:

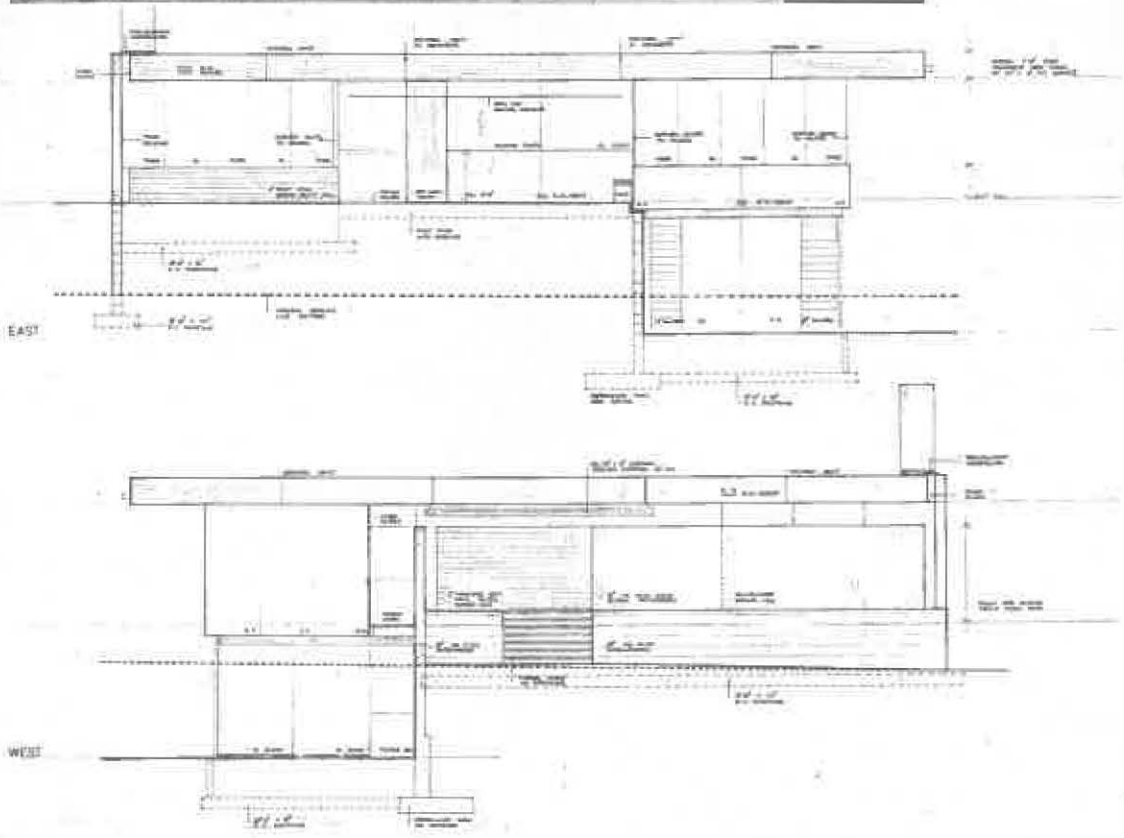
"Modernism was the way it was going... The more we could shock, the better it was, and we were doing it with sublime innocence, that this was the way it was going to be. That unless the window stretched from there to there (the full width of the room) you weren't trying! The fact that you had to put curtains right the way across afterwards, that came as a learning process. It was a very, very different climate of opinion in those days".[55]

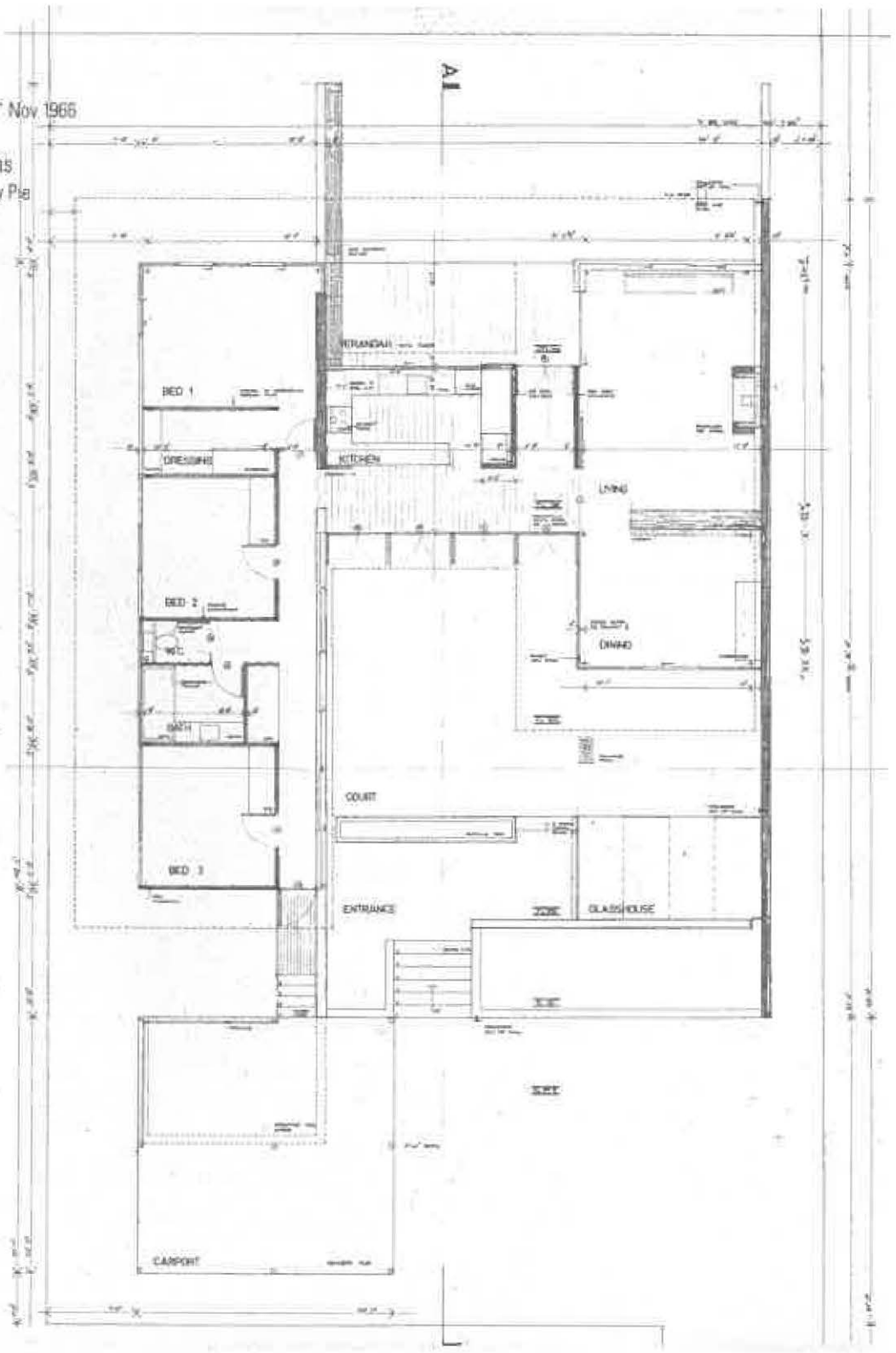
The sixties house embodied one of the last manifestations of the International Style on the local architectural scene. The modernist language and the underlying desire to contribute to a brighter social future, helped shape housing design of the period.

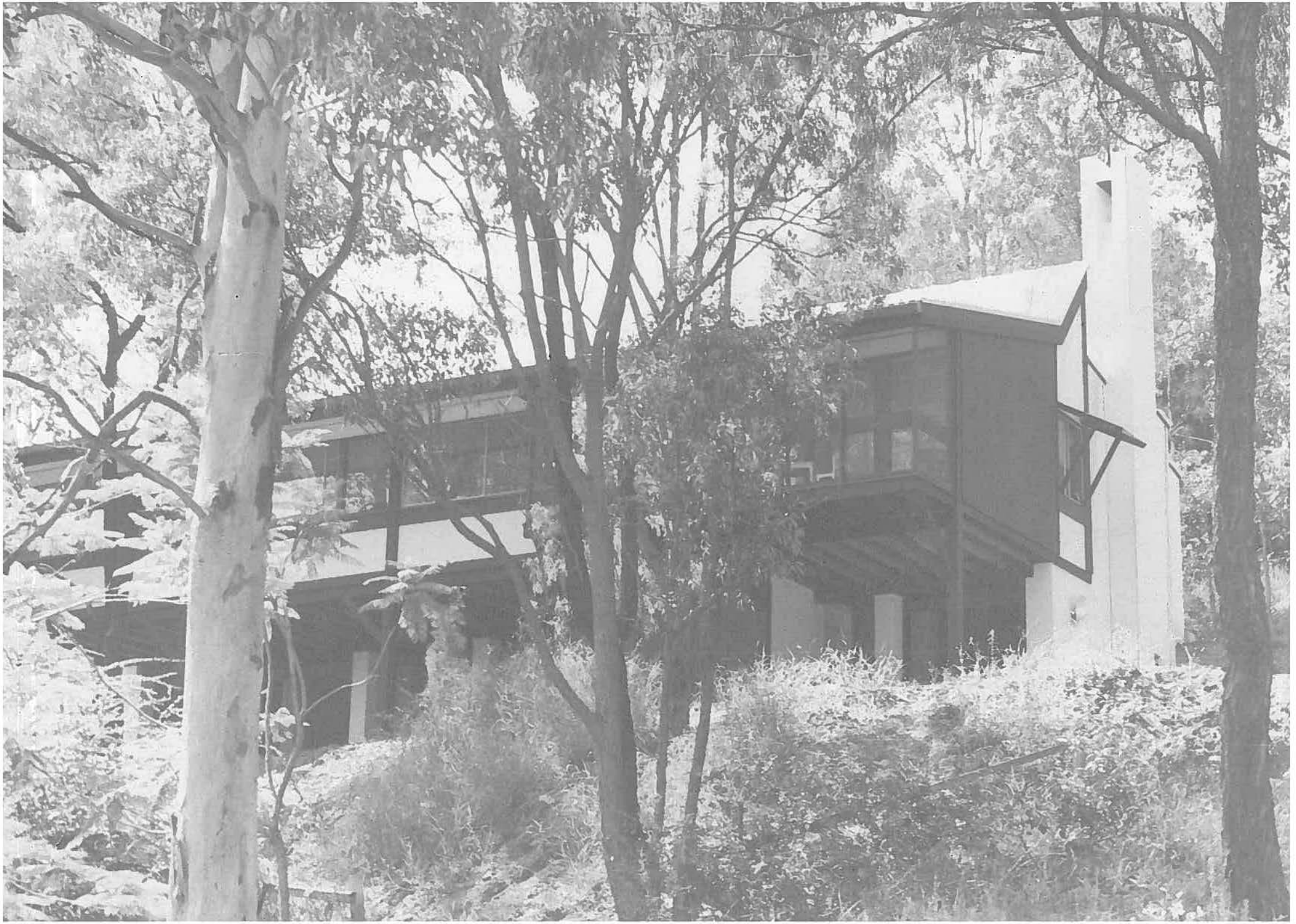


Pie House 1966
Geoffrey Pie
"Architecture & Arts" Nov 1966

Plan and elevations
collection of Geoffrey Pie







A Queensland style?

In the sixties, as in other decades, there were calls for a uniquely Australian style of architecture to be developed. An article published in 1960, *"The Emergence of a Tradition"*, postulated the need for a national style and suggested looking back to Australia's architectural past for inspiration: *"Ancher, Mortlock and Murray in Sydney and Dalton and Heathwood in Brisbane are bringing back to their modern custom built houses the poetic and soft quality of the best of the early Australian architecture"*.[56]

Interest in Australia's architectural history grew in the 1950s with publications such as Robin Boyd's *Australia's Home* (1952) and Morton Herman's book *The Early Australian Architects and their Work* (1954). This was also the time when branches of the National Trust began forming in each state and more people became aware of the historical buildings of Australia.

The Queensland branch of the National Trust was formed in 1963 and its objectives included the preservation and maintenance of historic buildings. The Trust's first property, Wolston House, was bought in 1963 and other properties were later acquired in order to preserve them. Other historical societies were formed and the conservation movement began in earnest to preserve Australia's heritage.[57]

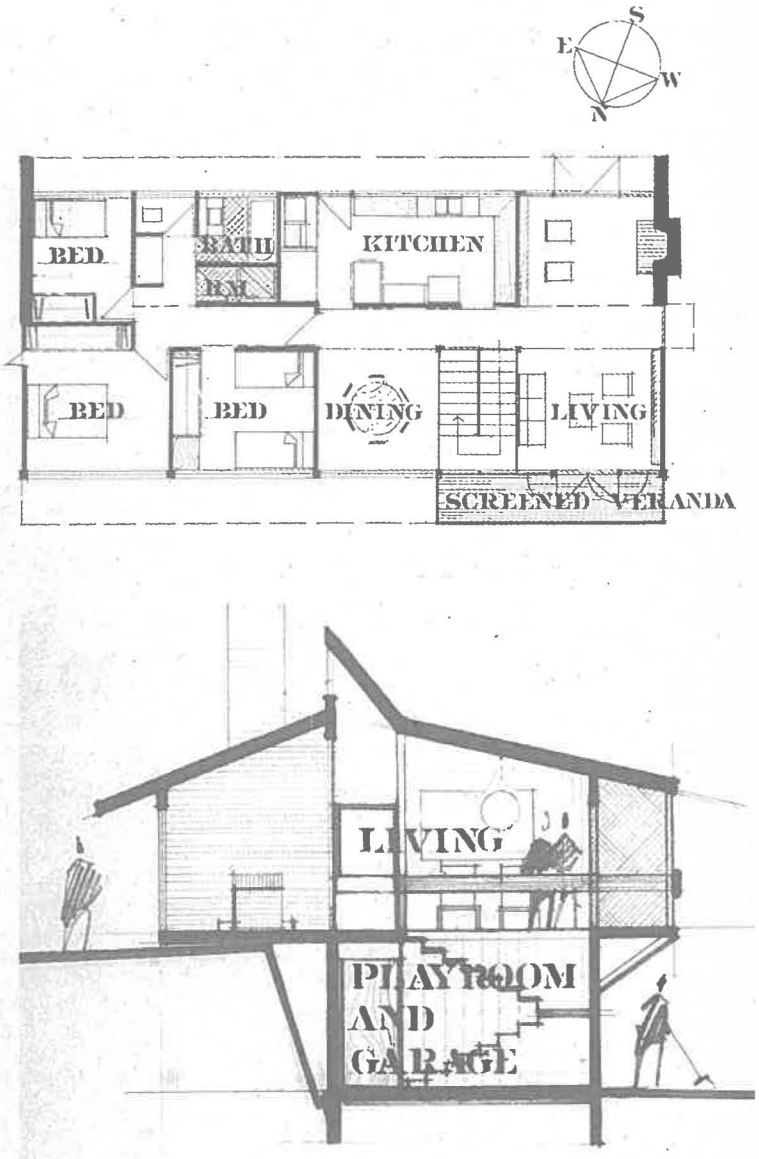
The Traditional House

Locally, a number of architects cited an interest in developing a Queensland style. Yet, despite an awareness of Queensland's historical architecture, the traditional Queensland house was not seen by sixties architects as a model for a regional style. Dalton remembered deriding historical architecture: *"If you read the magazines (of the 60s), here I am saying, with Peter Heathwood, that tomorrow is going to be different, that old architecture is doomed to fail because the traditional forms are neither suited to climate, because there's no insulation in the roof, etc.etc. We were going to do it all differently. We'll have Stramit roofs. I had a water spray on the roof to cool it down. We were going to do all these lovely things"*.[58]

Building restrictions after the war had reduced the house to an economical core stripped of its verandahs and under-floor area because of minimum floor area laws[59]. Although the minimal post-war house was seen as inadequate, the traditional house was also seen as old-fashioned and not suitable for modern living. Architects of the sixties, while admiring the traditional house, did not adopt its roof forms or other details.

Few elements of the traditional Queensland house found their way into John Dalton's architecture. In an article written in the sixties, Dalton described Queensland's traditional houses: *"...as light timber-framed structures high on stumps with screening, and window hoods to small openings"*. He concluded that: *"The past was quaint, amusing and very uncomfortable..."*[60]

Dalton took note of the devices that traditional houses used for climatic control and translated these into his housing designs. He spoke specifically about roof ventilators on old Queensland buildings and said that he amalgamated these ideas with the new ethos of the time.[61] An article in *"Cross-section"* in April 1967 describes how the "Colt" ventilator was used to extract warm air, and Dalton's Wilson and Graham houses were used as examples: *"The need for cross ventilation and warm air egress at roof level in Brisbane's hot humid climate prompted the 'section' of these two houses. The marked roof accent on the Southern aspect provides the housing for 'Colt' ventilators which evacuate warm air from the major rooms..."*[62]



opposite
Graham House 1966
John Dalton
photo Richard Stringer
collection of John Dalton

Dalton credits Peter Heathwood with showing him, an immigrant from England, the essence of Queensland architecture: *"When I met Peter I suddenly sensed that he had an almost Manly boatshed ethos, that he knew what Queensland was all about, whereas I came from the north of England. And what I thought was tacky lattice, he'd blow it up into this fabulous [Speare] house."*[63]

Heathwood, when speaking of the Speare House, said that he was keen to use modern methods and yet still respect Queensland's heritage by using the lattice panels in a new way. He was particularly interested in integrating his houses with the site in order to find a distinctly Queensland style of architecture. In doing this, Heathwood referred to his inspiration from the Australian landscape, much like Alvar Aalto derived inspiration from the Finnish landscape. He said he wasn't influenced by Queensland's historical buildings, because he thought they were a derivative of Georgian English architecture which came to Australia via India.[64] He saw a Queensland style of architecture emerging from the local landscape rather than from the influence of local historical buildings.

Steve Trotter noted that a small group of architects from the sixties were seeking a distinctly Queensland style. When asked if he was interested in developing a Queensland style he said: *"Yes, I'd say it started with Hayes and Scott – well it started with Robin Dods – but Hayes and Scott were seeking, and John Dalton and I went through the course much at the same time. He was a next door neighbour of mine in the first house, actually, and I think a group of us were seeking new buildings that were suitable to the climate, using local labour who were good at doing carpentry work and so forth".*[65]

He said that his inspiration for this regional architecture was not derived from the historical buildings of Queensland, although he admired the work of Robin Dods. He cited Dods's use of timber filigrees, friezes and the verandah to filter the strong sunlight as influential, not so much in the forms themselves, but in the way they modified the climate. He also mentioned his ancestor, George Trotter, who practised as an architect from the turn of the century, as notable. He admired the way his buildings related to the Queensland climate.[66]

The design of Trotter's Mather's house in 1964 revealed not only climatic devices, such as a white-tiled roof to reflect heat and large louvred shutters that slid away to facilitate ventilation, but a reinterpretation of traditional housing elements. The house consisted of two pavilions joined by the kitchen/breezeway. Trotter said that he wanted to create a Queensland feel without the usual verandah posts. He achieved this with a steel structure that supported wide overhangs over the verandah.[67]

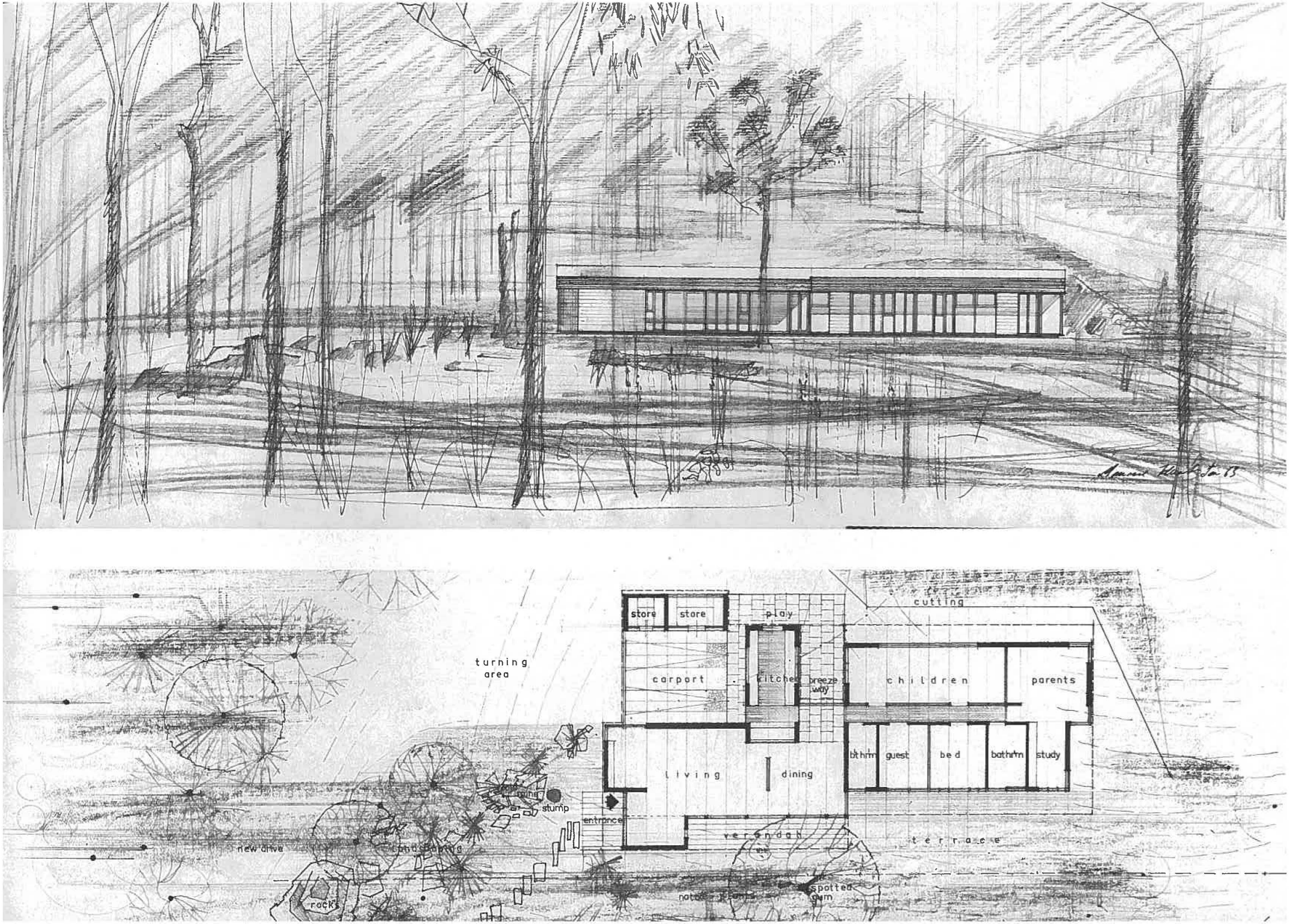
Geoffrey Pie stated that Queensland's historical architecture influenced his work, mainly through his experience of being involved with the National Trust of Queensland. He described his houses as pure Mies houses in a Queensland idiom, and spoke of his respect for Queensland's heritage which was expressed in his work.[68] Again, it is the way these vernacular houses relate to the climate, rather than their forms, which influenced his work.

Maurice Hurst declared that in the sixties, his houses were consciously not influenced by the Queensland traditional house, even though he was aware of it: *"It is my view that the rejection by me of the timber vernacular was directly related to the need to express those architectural forms that interested me at the time. The early Australian houses with their wide verandahs, glazed casement doors were in the London Georgian tradition. The raised timber house held little interest even though I lived in one".*[69]

Hurst said that his clients requested that their houses were not high-set like the Queensland houses they were used to, and wanted their houses set close to the ground. This was shown in his 1963 design for the Roe house, which was constructed of brick on a concrete slab set into the side of a hill. Hurst said that he selected samples of timber and rock from the site and designed the house to appear to be part of the countryside. He decided to keep the scale of the house low and to follow a contour line to facilitate views over the landscape, deliberately contrasting the major aspect with a somewhat tight courtyard space at the back of the house. He also echoed the spaces between the many trees on the site in the close proximity of the mullions and window frames, by making the glazing tall and slim. [70]

Most of the architects who were interviewed said they wanted to produce an architecture with a distinctly Queensland flavour. They did not, however, adopt the forms of Queensland's historical architecture to achieve this. Being aware of the way the traditional house dealt with climate, they felt free to use some of these devices, such as roof ventilation, screening and verandahs. They did not, however, imitate the forms of the traditional house, such as the hip or pyramid roof and the elaborate verandah detailing. They adapted elements to temper the Queensland climate and used them in a non-derivative way, incorporating them into the prevailing International language of the time. Given that the architects cited a broad range of architectural influences, any common strand to a 'Queensland flavour' is possibly less about built form and more concerned with a local mode of living; a way of living in tune with the demands of the climate and the changing use of domestic space.

Roe House 1963
Maurice Hurst at Lund Hutton Newell Black & Paulsen
The University of Queensland Library, Fryer Library, Lund Hutton Ryan Morton collection, UQFL211, Job No.2479


store
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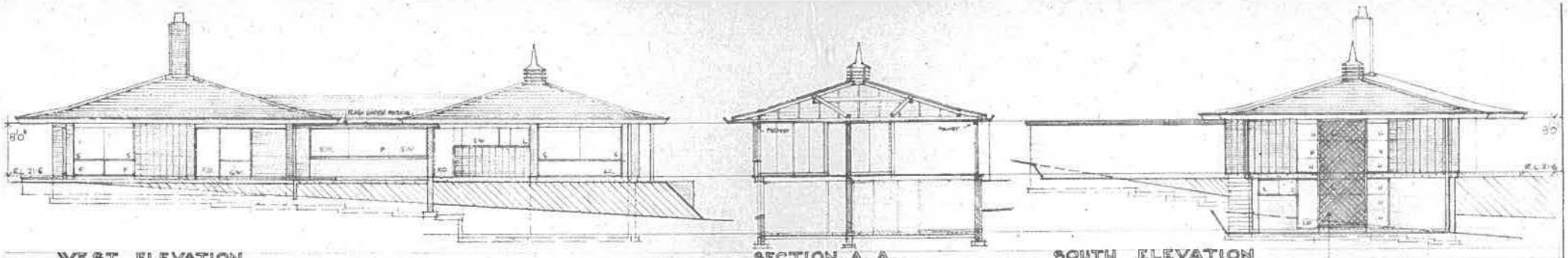
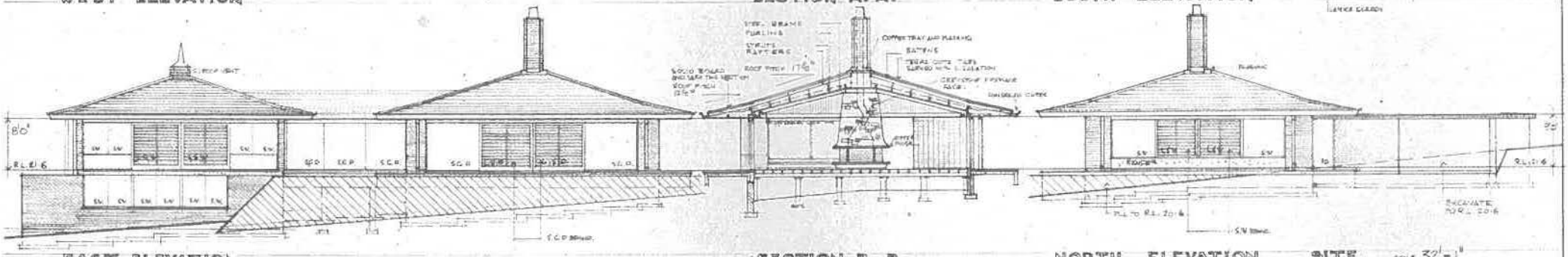
new drive
rock's
spotted gum



WEST ELEVATION

SECTION A. A.

SOUTH ELEVATION

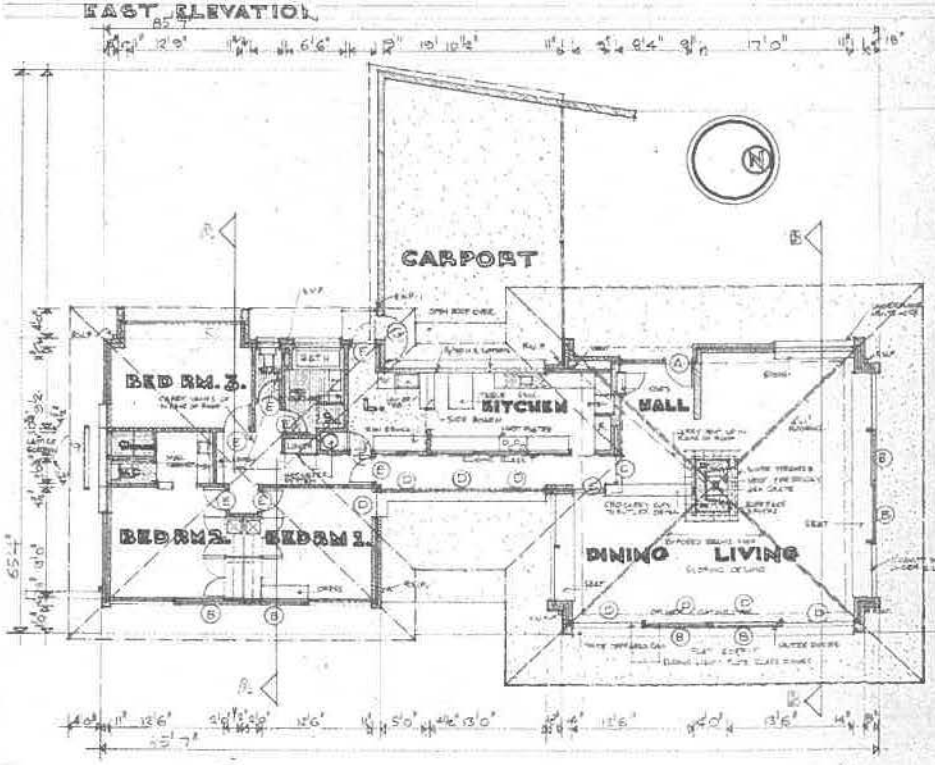


EAST ELEVATION

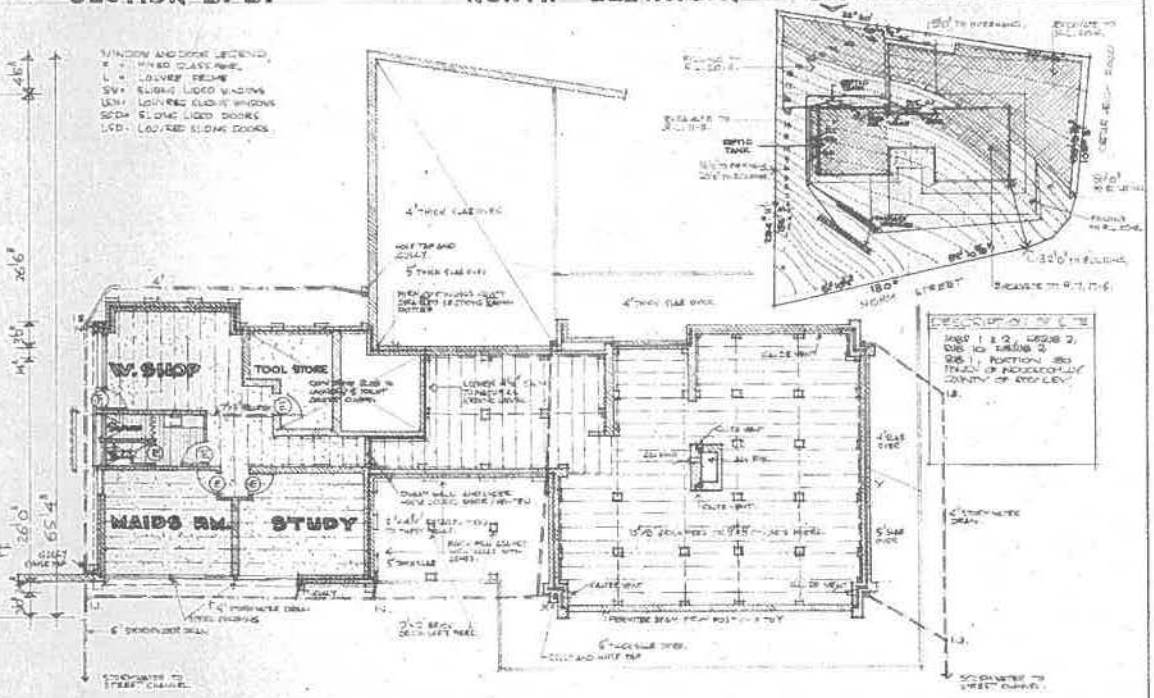
SECTION B. B.

NORTH ELEVATION

SITE SCALE 32'-1"



PLAN



BASEMENT & FOUNDATIONS

WORKING DRAWING

RESIDENCE AT CEDARLEIGH ROAD KENMORE FOR W. MATHERS E S Q.

FULTON, COLLIN AND PARTNERS ARCHITECTS 96-98 ASTOR TERRACE NTH BRISBANE

SCALE 1/8" = 1'0" DRWG SET DWG 1/376

Conclusion

The sixties house was shaped and influenced by a number of factors. The background and training of the architects who designed these houses left its mark. Architectural practices of the fifties, and the training received there, left a legacy that carried the principles of these practices into the sixties. Practices like Hayes and Scott and Theo Thynne and Associates were melting pots for new architectural ideas which influenced the architects-in-training who were to make their mark on the next decade.
Many characteristics of the sixties house in Brisbane, particularly in response to climate and lifestyle were anticipated in the work of the fifties.
The sixties house embodied the final influence of the International Style on the local architectural scene. The Modern Movement was the progressive architectural ethos, from early in the twentieth century to the sixties, and had a significant influence on these architects while they were students. The sixties houses of Brisbane drew diversely on these principles, both in the architectural language used, and in the underlying ethos to provide a brighter future for humanity.
An International architectural language was modified by regional factors, the most important being climate. There was an emerging interest in the field of climatic design during the sixties which was expressed in experimental design features of many of the houses. These innovative features included vented and layered roof systems, operable walls, innovative window and wall ventilation and the incorporation of indoor/ outdoor living areas using terraces and verandahs. Interviews with architects revealed that climatic factors were often a major determinant of the design.

Climatic design elements modified the underlying characteristics of the International Style and produced a body of work which, to varying degrees, blended these local and global concerns.
The search for an architecture with an identifiable Queensland flavour was common to many architects who were interviewed. They did not, however, adopt the forms of traditional Queensland houses to achieve this. Being aware of the way the Queensland house dealt with climate, they felt free to use some traditional devices, such as roof ventilation, screening and verandahs. They did not, however, imitate the forms of the traditional house, like the hip or pyramid roof and the elaborate verandah detailing. Instead, they adapted elements to temper the Queensland climate and used them in a non-derivative way, incorporating them into the prevailing International language of the time.
Lifestyle factors also had an influence on the sixties house. Factors such as the general prosperity of the population, the popularity of indoor/ outdoor living, and the increase in car ownership all helped shape the design of the house. New methods of using existing building materials and technology, like the use of the concrete slab-on-ground and the modular window system, changed the form and setting of the house to connect with, rather than rise above, the garden landscape.
The houses of the sixties form an innovative, important body of work. These houses, embodying characteristics of the International Style influenced by regional factors, form part of a continuum in the search for a regional architectural expression. They exist as a legacy from the 1960s, manifesting the desire for a domestic architecture suitable for Queensland, a search which continues today.

Morrow House 1967
Geoffrey Pie
photo Richard Stringer

Mathers House 1964
Steve Trotter at Fulton Collin & Partners
Trotter Moss & Partners archive

Biographies of interviewed architects

These biographies largely concentrate on the period of the architects' training and practice as it relates to the work produced in the 1960s.

Graham Bligh

Graham was born in Toowoomba in1933. He was granted a Bachelor of Architecture (Qld) in 1957 and became a registered architect (Qld) in 1958. He completed his early training in the offices of Conrad & Gargett and Bligh Jessup Bretnall. Graham worked for Fry & Drew in London from 1959 to 1960, and joined the practice of Bligh Jessup Bretnall after returning to Brisbane in the early sixties. This firm is now known as Bligh Voller Nield. He completed a Master of the Built Environment (UTS) in 1994.

John Dalton

John was born in Great Britain in 1927. He served in the British Royal Air Force 1946–48 before immigrating to Australia in 1950. He was granted a Diploma of Architecture (Qld) in 1958. John trained in the offices of the Brisbane City Council with Frank Costello, then with Cook & Kerrison, Hayes & Scott and Theo Thynne & Associates. He became a registered architect (Qld) in 1957. He also formed the partnership of Dalton & Heathwood in 1957, and established his own practice, John Dalton & Associates, in the late 1950s.

Dr. Graham de Gruchy

Graham was born in South Africa in 1924 and received his architectural training there. After moving to Britain, he worked for the London County Council Housing Division. He immigrated to Australia in 1962, and became a Lecturer in the Department of Architecture at the University of Queensland in 1963. He was Reader in Architecture 1968, and completed a Master of Architecture (QLD) in 1968. Graham was awarded a Diploma of Regional and Town Planning in 1969, and a Ph.D. (QLD) in 1977. He was Associate Professor and Dean of the Faculty of Architecture & Planning in 1981. Graham wrote *"Architecture in Brisbane"* published by Boolarong Publications and Kookaburra Books in 1988.

Robin Gibson

Robin was born in Brisbane in 1930. He trained in the offices of the City Architect, Frank Cullen, then with Hayes & Scott and Theo Thynne & Associates. While in London during 1955, he worked for James Cubitt & Partners, Sir Hugh Casson and Neville Conder. He became a registered architect (Qld) in 1956, and established Robin Gibson & Partners in 1957.

Peter Heathwood

Peter was born in Brisbane in 1932. He trained in the offices of the Brisbane City Council with Frank Costello, then with Theo Thynne & Associates, Job Collin & Fulton, Powell Dods & Thorpe, Crick Lewis & Williams and Job & Froud. He was awarded a Diploma of Architecture (Qld) in 1956 and became a registered architect (Qld) in 1957. The practice of Dalton & Heathwood was formed in 1957, after which he established his own private practice.

Maurice Hurst OAM (Order of Australia Medal)

Maurice was born in Great Britain in 1929. He trained at the Hammersmith School of Building in London, and the College of Architecture from 1946 to 1952. He become an associate of the Royal Institute of British Architects and worked with Joseph Pemberton FRIBA in 1953. He completed his British military service from 1953 to 1955 and then immigrated to Australia. He became a registered architect (Qld) in 1958. He was an Associate with Ford Hutton & Newell from 1958 to the late 1960s. Maurice passed away on 13 November 2003.

Nevil Miller

Nevil was born in 1924. He trained with Theo Thynne & Associates and was awarded a Diploma of Architecture (Qld) in 1956. He became a registered architect (Qld) in 1957 and commenced private practice in Brisbane in 1960.

Geoffrey William Pie
Geoffrey was born in 1938. He trained in the offices of H.S. MacDonald, Fulton & Collin, and with Robin Gibson in Brisbane. After gaining a Diploma of Architecture (UQ) in 1962, he worked for Gollins, Melvin Ward in London from 1963 to 1964. He also studied graphic design at St Martin's School of Art in London during 1963 and 1964. He became a registered architect (Qld) in 1963 and completed a Diploma of Town and City Planning (QIT) in 1969.

David Roessler
David was born in 1935. He trained in the office of Jim Birrell in Brisbane before moving to Melbourne, where he worked with Guilford Bell, Grounds Romberg & Boyd and Bates Smart & McCutcheon. He completed a Bachelor of Architecture (Melb.) in 1962, and became a registered architect (Vic.) in 1963. He received a Masters degree from Columbia University (New York) in 1985.

Steve Trotter
Steve was born in Brisbane in 1930. He trained in the offices of Mervyn Rylance and Fulton & Collin. He gained a Diploma of Architecture (Qld) in 1954 and became a registered architect (Qld) in 1955. He started in practice as Associate then Partner of Fulton, Collin, Boys, Gilmour, Trotter in 1958 until 1999. Steve was the RAIA Sisalkraft Scholar in 1963.

Don Winsen
Don was born in Brisbane in1927. He trained in the offices of the Brisbane City Council with the Architects Group, then with F.L. Cullen, Thynne & Hitch, and Theo Thynne & Associates. He was granted a Diploma of Architecture (Qld) in 1952 and became a registered architect (Qld) in 1953. He commenced private practice as Don Winsen Pty Ltd in 1961, then joined Conrad & Gargett in 1975.

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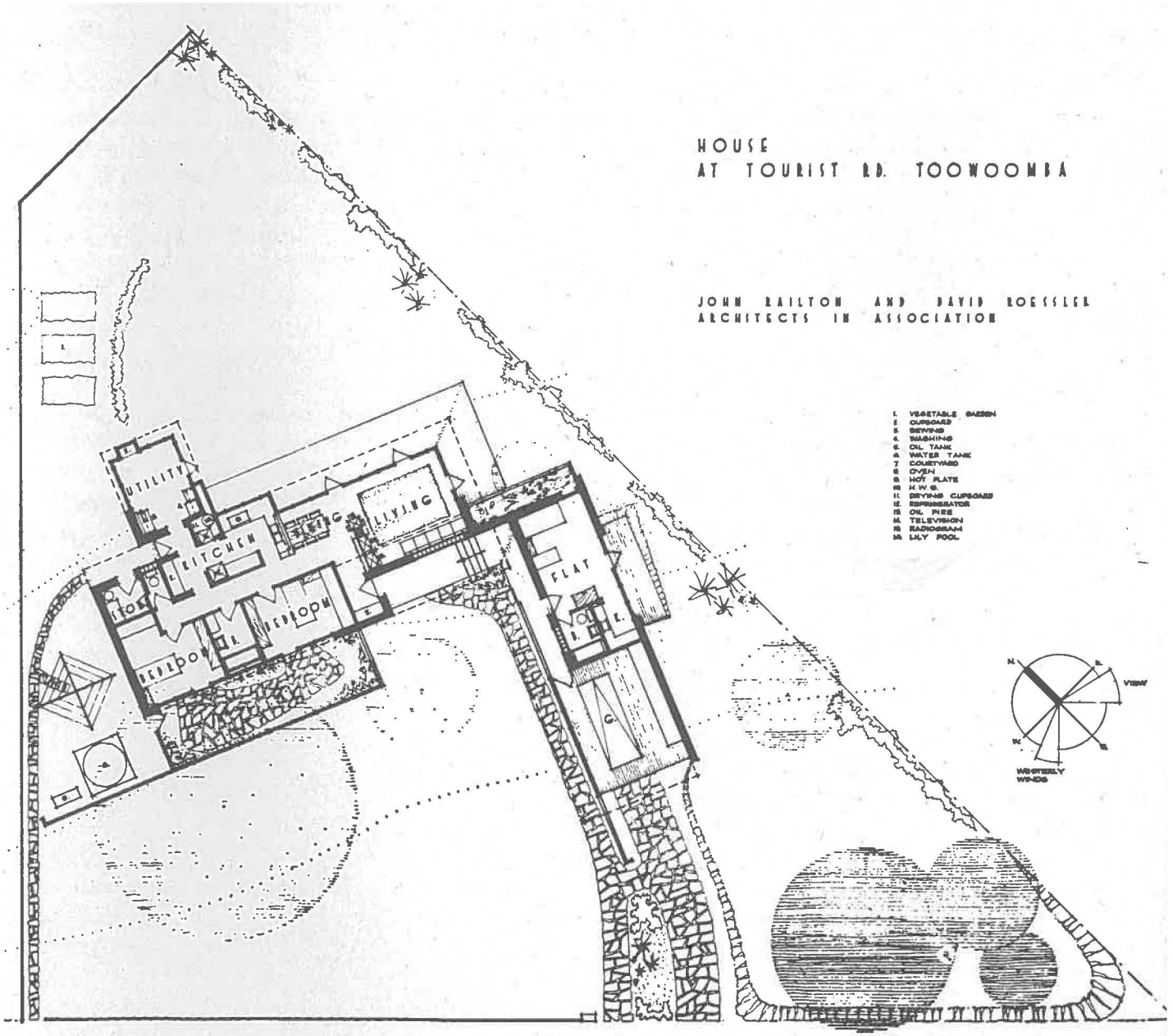
Centre line, Brisbane: Royal Australian Institute of Architects (Qld), 1960–1969.

Roessler House 1967
David Roessler
"Architecture in Australia" Feb 1967



Published houses

Compiled from the journals *Architecture in Australia, Architecture* and *Arts* and *Cross Section,* published during the 1960s, and may not be a complete record.

Architect | Client/Description | Journal Reference | Title of Article | Location | Contents of Article | Notes

1960

John Dalton | Dalton Res. | *Arch. & Arts,* Aug. 1960, pp33–35 | Dalton's Residence, Fig Tree Pocket, Brisbane. | Fig Tree Pocket | Plan, section, photos, text

1961

John Dalton | Flats | *Arch. & Arts,* Aug. 1961, pp46–47 | Flats at Toowong, Brisbane. | Toowong | Plan, photos, text

John Dalton | Flats | *Cross Section* No.107, Sept. 1961 | na | Toowong | Photo, text

J. Van Den Broek | Flats | *Cross Section* No.107, Sept. 1961 | na | New Farm | Photo, text

1962

Darval Miller | House | *Arch. In Aust.* March 1962, pp120–121 | House, Brisbane | Brisbane | Plan, photos

John Dalton | House | *Arch. & Arts* Nov. 1962, p33 | The Ten Best Houses & Buildings for 1961–62 | Kenmore | Photo

J. Van Den Broek | House | *Cross Section* No. 121 Nov. 1962 | na | Stafford Hts | Photo, text

1963

Stephen Trotter of **Fulton Collin & Partners** | W. Mathers, extension to exist house. | *Arch. In Aust.* March 1963 pp81–82 | Tropical House | Fig Tree Pocket | Plan, photos, text | Note: extension to exist house – Trotter

John Dalton | House | *Arch. & Arts* May 1963 pp40–41 | House at Buderim Mountain, Qld | Buderim | Plan, photos, text | Landscaping by Edna Walling

John Dalton | House | *Arch. & Arts* May 1963 p42 | House at Aspley, Brisbane | Aspley | Plan, photo, text

John Dalton | House | *Arch. & Arts* May 1963 p43 | House at Moggill, Brisbane | Moggill | Plan, photo, text

John Railton | Railton's house & office | *Cross Section* No.133 Nov. 1963 | na | Fortitude Valley | Photos, text

Maurice Hurst of **Lund Hutton Newell Black & Paulsen** | House | Arch. In Aust Dec. 1963 pp105–106 | House | Indooroopilly | Plan, photos, text

1964

John Railton | Railton's house & office | *Arch. In Aust.* March 1964 pp110–111 | Architect's own house-office | Fortitude Valley | Plan, section, photos, text

Goodsir & Carlyle | House & office | *Arch. In Aust.* March 1964 pp112–113 | Architect' own office | St. Lucia | Plan, photos, text

John Dalton | 3 Houses incl. – Wilson House at Mt. Coot-tha | *Arch. & Arts* June 1964 pp35–38 | Three Houses in Queensland | Mt Coot-tha, Indooroopilly, Chelmer | Plans, photos, text | Wilson House, Mt. Coot-tha won 1964 House of Year – RAIA

Graham Bligh of **Bligh Jessup Bretnall & Partners** | House | *Cross Section* no.142 Aug. 1964 | na | St. Lucia | Photo, text

John Dalton | Wilson House | *Cross Section* no.142 Aug. 1964 | na | Mt Coot-tha | Photo, text

Campbell Scott of **Hayes & Scott** | House | *Cross Section* no.142 Aug. 1964 | na | Indooroopilly | Photo, text

Robin Gibson | House | *Cross Section* no.142 Aug. 1964 | na | Buderim | Photo, text

Maurice Hurst of **Lund Hutton & Newell** | House | *Cross Section* no.142 Aug. 1964 | na | Kenmore | Photo, text

John Dalton | Wilson House | *Arch. In Aust.* Dec. 1964 pp101–102 | House | Mt. Coot-tha | Plan, section, photos, text

1965

W.H. Carr of **Uni of Qld** | Solar house | *Arch. In Aust.* March 1965 pp122–125 | Solar air-conditioned house | Moggill Farm, near Brisbane | Plan, section, photos, text

Graham Bligh of **Bligh Jessup Bretnall & Partners** | O'Neill House | *Arch. In Aust.* June 1965 pp118–119 | House | St. Lucia | Plan, photos, text

John Dalton | 4 houses | *Arch. & Arts* Aug. 1965 pp12–15 | Four Queensland Homes | Kenmore, Pullenvale, Chapel Hill | Plans, photos, text

Graham de Gruchy | Cluster Houses (competition) | *Telegraph,* 27 October 1965, p.45 | na | na | Plans

Nevil Miller | Piesse Flats | *Cross Section* No.158 Dec. 1965 | na | Manly | Photo, text

1966

John Dalton | Smith House | *Cross Section* No. 161 March 1966 | na | Kenmore | Photo, text

Maurice Hurst of **Lund Hutton & Newell** | House | *Arch. & Arts* Sept 1966 pp14–15 | House at Kenmore | Kenmore | Plan, photos, text

John Dalton | Smith House | *Arch. In Aust.* July 1966 p149 | House | Kenmore | Plans, photo, text

Robin Gibson | Mocatta House | *Arch. & Arts* Nov. 1966 p19 | RAIA Qld chapter awards | Yeronga | Photo | Residence of the year, 1966

Graham Bligh of **Bligh Jessup Bretnall & Partners** | Benson House | *Arch. & Arts* Nov. 1966 p20 | RAIA Qld chapter awards | Tarragindi | Photo | Highly commended, 1966

Geoffrey Pie | Pie House | *Arch. & Arts* Nov. 1966 p20 | RAIA Qld chapter awards | Surfers Paradise | Photo | Highly commended, 1966

A.H. Job & R.P. Froud | Foot House | *Arch. & Arts* Nov. 1966 p20 | RAIA Qld chapter awards | St. Lucia | Photo | Commended, 1966

Donald Spencer & Spencer | Copland/Ward House | *Arch. & Arts* Nov. 1966 p21 | RAIA Qld chapter awards | The Gap | Photo | Commended, 1966

Robin Gibson | Mocatta House | *Cross Section* No.169 Nov. 1966 | na | Yeronga | Photo, text | Residence of the year, 1966

Graham Bligh of **Bligh Jessup Bretnall & Partners** | Benson House | *Cross Section* No.169 Nov. 1966 | na | Tarragindi | Photo, text | Highly commended, 1966

Geoffrey Pie | Pie House | *Cross Section* No.169 Nov. 1966 | na | Surfers Paradise | Photo, text | Highly commended, 1966

John Dalton | Magee House | *Arch. In Aust.* Nov. 1966 p86 | House | Kenmore | Plan, photo, text

1967

Nevil Miller | Piesse Flats | *Arch. In Aust.* Feb 1967 pp92–93 | Flats | Manly | Plan, section, photos. Text

John Railton & David Roessler | Roessler House | *Arch. In Aust.* Feb. 1967 pp82–83 | House | Toowoomba | Plan, photos, text

John Dalton | House | *Arch. & Arts* March 1967 pp10–11 | House at Brookfield, Brisbane | Brookfield | Plan, photos, text

Thynne Denham & Assoc. | De Luca House | *Arch. & Arts* March 1967 p14 | Meritorious Lighting Award 1966 | Coorparoo | Photo, text
John Dalton | 2 houses | *Cross Section* No.174 April 1967 | na | Taringa, Indooroopilly | Photos, text
Peter Heathwood | Sturgess House | *Arch. In Aust.* June 1967 pp444–445 | House | Indooroopilly | Plan, photos, text
John Dalton | Graham House | *Arch. In Aust.* Aug. 1967 pp612–613 | House | Taringa | Plan, section photos, text | RAIA House of year, 1967
John Railton | Miadek House | *Cross Section* No178 Aug. 1967 | na | Everton Park | Photo, text
Stuart McIntosh | Dauth House | *Cross Section* No.180 Oct. 1967 | na | na | Photo. Text

1968

Joe Turnbull | Turnbull House | *Cross Section* No.184 Feb. 1968 | na | Kenmore? | Photo, text
E.T. Codd | Harley Industries Prototype House | *Cross Section* No.187 May 1968 | na | na | Photo, text
Pat Moroney | Moroney House | *Cross Section* No.192 Oct. 1968 | na | Chelmer | Photo, text
Graham de Gruchy | Flats at Toowong | *Cross Section* No. 192 Oct. 1968 | na | Toowong | Photo, text
John Dalton | House | *Cross Section* No.193 Nov. 1968 | na | Brookfield | Photo, text
John Railton | Miadek House | *Arch. In Aust.* Dec. 1968 pp1110–1111 | House | Everton Park | Plan, photos, text

1969

Graham Bligh of **Bligh Jessup Bretnall & Partners** | Bligh House | *Arch. In Aust.* Aug. 1969 pp634–636 | Architect's own house | Kenmore | Plan, section, photos, text
Graham de Gruchy | Housing Kit | *Cross Section* No.202 Aug. 1969 | na | na | Drawing, text | Winner of the Brisbane Telegraph House for the 70s
E. Codd of **Codd Hopgood & Assoc.** | Harley Industries prototype house | *Arch. In Aust.* Oct. 1969 pp869–870 | System built house | Taringa | Plan, photos, text

Contributors' Biographies

Tracey Avery is a freelance curator with a background in the decorative arts and heritage conservation. From 1992 to 1998 she worked in the Historic Buildings Department of the National Trust in England. She is currently undertaking a PhD in Architectural History and Conservation at the University of Melbourne.

Peta Dennis is a graduate architect with over ten years experience in the conservation and adaptive re-use of heritage places. She currently works for the Environmental Protection Agency assessing the development of places in the Queensland Heritage Register.

Professor Philip Goad is Deputy Dean and Head of Architecture in the Faculty of Architecture, Building and Planning at the University of Melbourne. He has written extensively in books and journals on contemporary and 20th century Australian architecture. He is currently editing a major monograph on Bates Smart, one of Australia's oldest architecture firms, and is collaborating on a select and critical survey of recent architecture in South and Southeast Asia.

Professor John Hockings is Head of School of the Design and Built Environment at Queensland University of Technology (QUT) and the Director of the Centre for Subtropical Design, a joint initiative between QUT and the Brisbane City Council. The Centre aims to promote high quality design that responds to the cultural, landscape and climatic characteristics of south-east Queensland in ways that are sustainable and appropriate. His current research is focused on regional and vernacular architecture across the Pacific.

Professor Jennifer Taylor is an architectural scholar known primarily for her publications on contemporary Australian, Pacific and Japanese architecture. In 1998 she was honoured with the inaugural Royal Australian Institute of Architects (RAIA) Marion Mahony Griffin award for writing and teaching, and in 2000 with the inaugural RAIA National Education Prize. She recently completed a book on the Japanese architect Fumihiko Maki, and her current research is looking at the architecture of the South Pacific.

Dr Paula Whitman is an architect and senior lecturer in the School of Design and Built Environment at the Queensland University of Technology (QUT). She is president of the Queensland Chapter of the Royal Australian Institute of Architects and a member of the Board of Architects of Queensland. Her current research focuses on the career progression of women in architecture, and the development of a national research policy for the RAIA.

Footnotes

[1] Peta Dennis, *Innovative Architecture for Living: Brisbane architect designed houses of the 1960s*, unpublished Bachelor of Architecture thesis, Queensland University of Technology, Brisbane, 1999
[2] Bruce Walker, *Gabriel Poole: Space in which the soul can play*, Noosa, Qld: Visionary Press, 1998 p 13
[3] Walker, *Gabriel Poole*, p 14
[4] Walker, *Gabriel Poole*, p 13, and interview with Geoffrey Pie, March 1999, in Dennis, *Innovative Architecture for Living*, p.173
[5] Dalton, in Dennis, *Innovative Architecture for Living*, p.145
[6] Trotter, in Dennis, *Innovative Architecture for Living*, p .189
[7] Unpublished interview with Gibson by Dennis, 1999
[8] Heathwood, in Dennis, *Innovative Architecture for Living*, p. 166–67
[9] Hurst , *Houses in Retrospect – 1960–1966: A personal view of the design process*, 1979, unpublished thesis by Maurice Hurst
[10] Dalton, in Dennis, *Innovative Architecture for Living*, p.145–46
[11] Heathwood, in Dennis, *Innovative Architecture for Living*, p.167
[12] Winsen, in Dennis, *Innovative Architecture for Living*, p.197
[13] Bligh, in Dennis, *Innovative Architecture for Living*, p.141
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overleaf
Poster for the 1967 student conference
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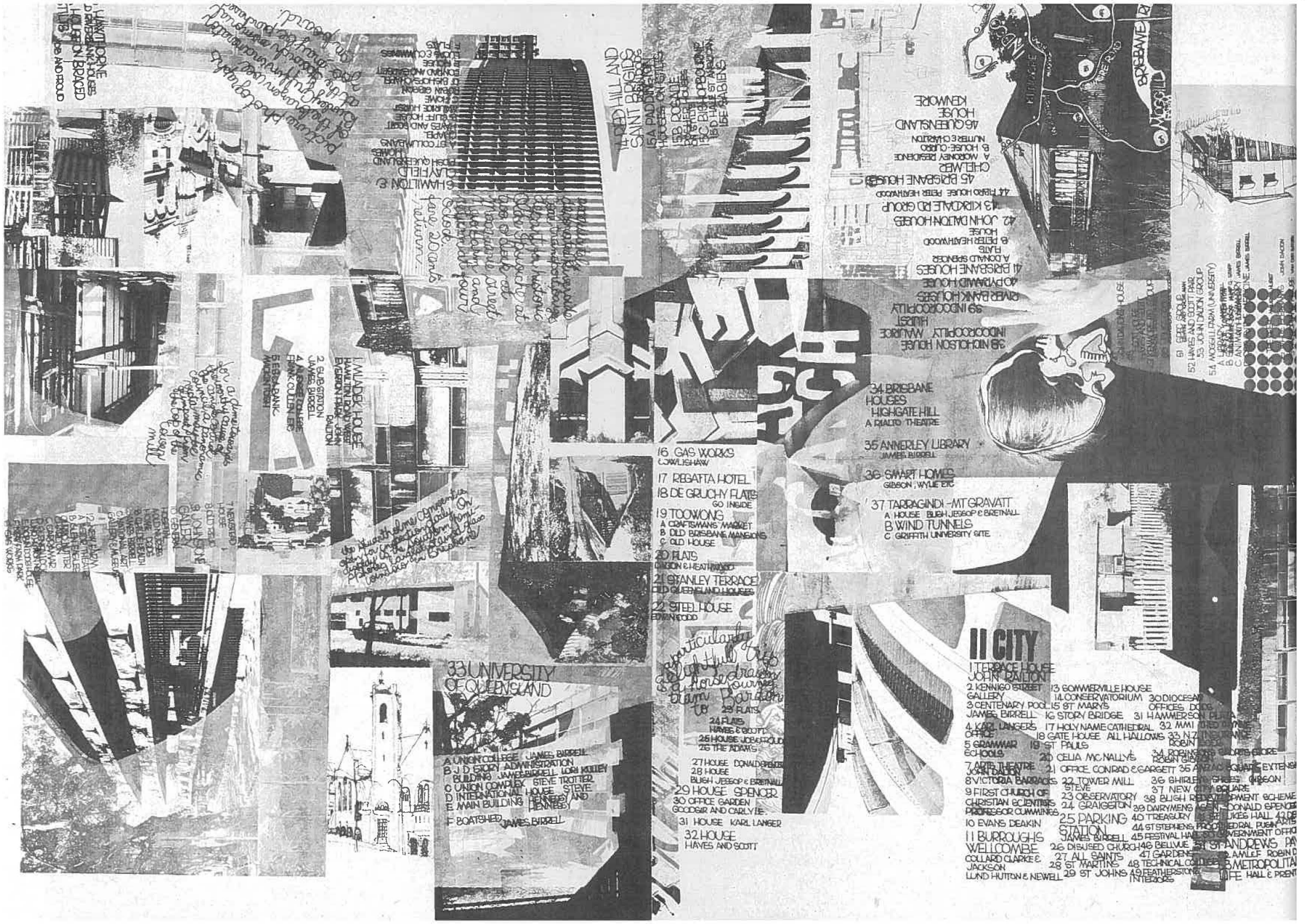
II CITY
1 TERRACE HOUSE JOHN RAILTON
2 KENNIGO STREET GALLERY
3 CENTENARY POOL JAMES BIRRELL
4 KARL LANGERS OFFICE
5 GRAMMAR SCHOOLS
6 CHURCH
7 ARTS THEATRE JOHN RAILTON
8 VICTORIA BARRACKS
9 FIRST CHURCH OF CHRISTIAN SCIENTISTS PROFESSOR CUMMINGS
10 EVANS DEAKIN
11 BURROUGHS WELLCOMBE COLLARD CLARKE & JACKSON LUND HUTTON & NEWELL
12 TOWER MILL STEVE
13 SOMMERVILLE HOUSE
14 CONSERVATORIUM
15 ST MARYS
16 STORY BRIDGE
17 HOLY NAME CATHEDRAL
18 GATE HOUSE ALL HALLOWS
19 ST PAULS
20 CELIA MC NALLYS
21 OFFICE CONRAD & GARGETT
22 OBSERVATORY
23 GRAIGSTON
24 PARKING STATION JAMES BIRRELL
25 DISUSED CHURCH
26 ALL SAINTS
27 ST MARTINS
28 ST JOHNS
29 DIOCESAN OFFICES DODS
30 HAMMERSON PLAZA
31 MMI
32 NEW CITY SQUARE
33 BLIGH REDEVELOPMENT SCHEME DONALD SPENCER
34 DAIRYMENS
35 TREASURY
36 ST STEPHENS PROPOSED CATHEDRAL
37 FESTIVAL HALL
38 BELLVUE
39 GARDENS
40 TECHNICAL COLLEGE
41 FEATHERSTONE INTERIORS
42 ST ANDREWS
43 METROPOLITAN
44 TOWN HALL
45 BRISBANE HOUSES
46 QUEENSLAND HOUSE KENMORE
1 HAMMERHORNE DRIVE HOUSES
2 HOUSE ON BRACED PILES AND ROOD
3 HAMILTON & CLAYFIELD HOMES
4 HOUSE AND FLATS
5 SUBSTATION JAMES BIRRELL
6 LADDER HOUSE HAMILTON ROAD WEEK EVERTON PARK JOHN RAILTON
7 NEWSTEAD HOUSE
8 OLD TEAS
9 JOHNSTONE GALLERY
10 GENERAL
11 NEW FARM PARK
12 BRISBANE HOUSES
13 HIGHGATE HILL
14 RIALTO THEATRE
15 ANNERLEY LIBRARY JAMES BIRRELL
16 GAS WORKS COWLISHAW
17 REGATTA HOTEL
18 DE GRUCHY FLATS GO INSIDE
19 TOOWONG
20 FLATS
21 STANLEY TERRACE
22 STEEL HOUSE
23 UNIVERSITY OF QUEENSLAND
24 FLATS HAYES & SCOTT
25 HOUSE
26 THE ADAMS
27 HOUSE DONALD SPENCER
28 HOUSE
29 HOUSE SPENCER
30 OFFICE GARDEN GOODGIR AND CARLYLE
31 HOUSE KARL LANGER
32 HOUSE HAYES AND SCOTT
33 UNIVERSITY OF QUEENSLAND
A UNION COLLEGE JAMES BIRRELL
B J D STORY ADMINISTRATION BUILDING JAMES BIRRELL LORI KELLEY
C UNION COMPLEX STEVE TROTTER
D INTERNATIONAL HOUSE STEVE
E MAIN BUILDING HENNESSY AND HENNESSY
F BOATSHED JAMES BIRRELL
34 BRISBANE HOUSES HIGHGATE HILL
A RIALTO THEATRE
35 ANNERLEY LIBRARY JAMES BIRRELL
36 SMART HOMES GIBSON, WYLIE ETC
37 TARRAGINDI - MT GRAVATT
A HOUSE BUSH JEBSOP & BRETNALL
B WIND TUNNELS
C GRIFFITH UNIVERSITY SITE
38 NICHOLSON HOUSE INDOOROOPILLY MAURICE HUDST
39 INDOOROOPILLY
40 PYRAMID HOUSE
41 BRISBANE HOUSES
A DONALD SPENCER
FLATS
B PETER HEATHWOOD HOUSE
42 JOHN DALTON HOUSES
43 KIRKDALE RD GROUP
44 TERRO HOUSE PETER HEATHWOOD
45 BRISBANE HOUSES
CHELMER
A MOONEY RESIDENCE
B HOUSE-CLARKE
NUTTER & CHARLTON
46 QUEENSLAND HOUSE KENMORE
51 GEORGE GROUP
52 HAYES AND SCOTT FLATS
53 JOHN DALTON GROUP
54 A LIBRARY
B
C ANNIVERSARY
BRISBANE
Mitchell
Kenmore Rd
Pacific Hwy
Gympie Rd
Kingsford Smith Dr
Airport
Eagle Farm
Nudgee Rd
Hamilton
Ascot
Hendra
Clayfield
Wynnum Rd
Lutwyche Rd
Enoggera
Wilston
Newstead
Bowen Hills
Fortitude Valley
Spring Hill
Milton
Toowong
Indooroopilly
Taringa
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Graceville
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Coorparoo
Greenslopes
Stones Corner
Buranda
Woolloongabba
Dutton Park
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Norman Park
Cannon Hill
Morningside
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Manly
Lindum
Tingalpa
Cleveland
Redland Bay
Capalaba
Carindale
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Rochedale
Sunnybank
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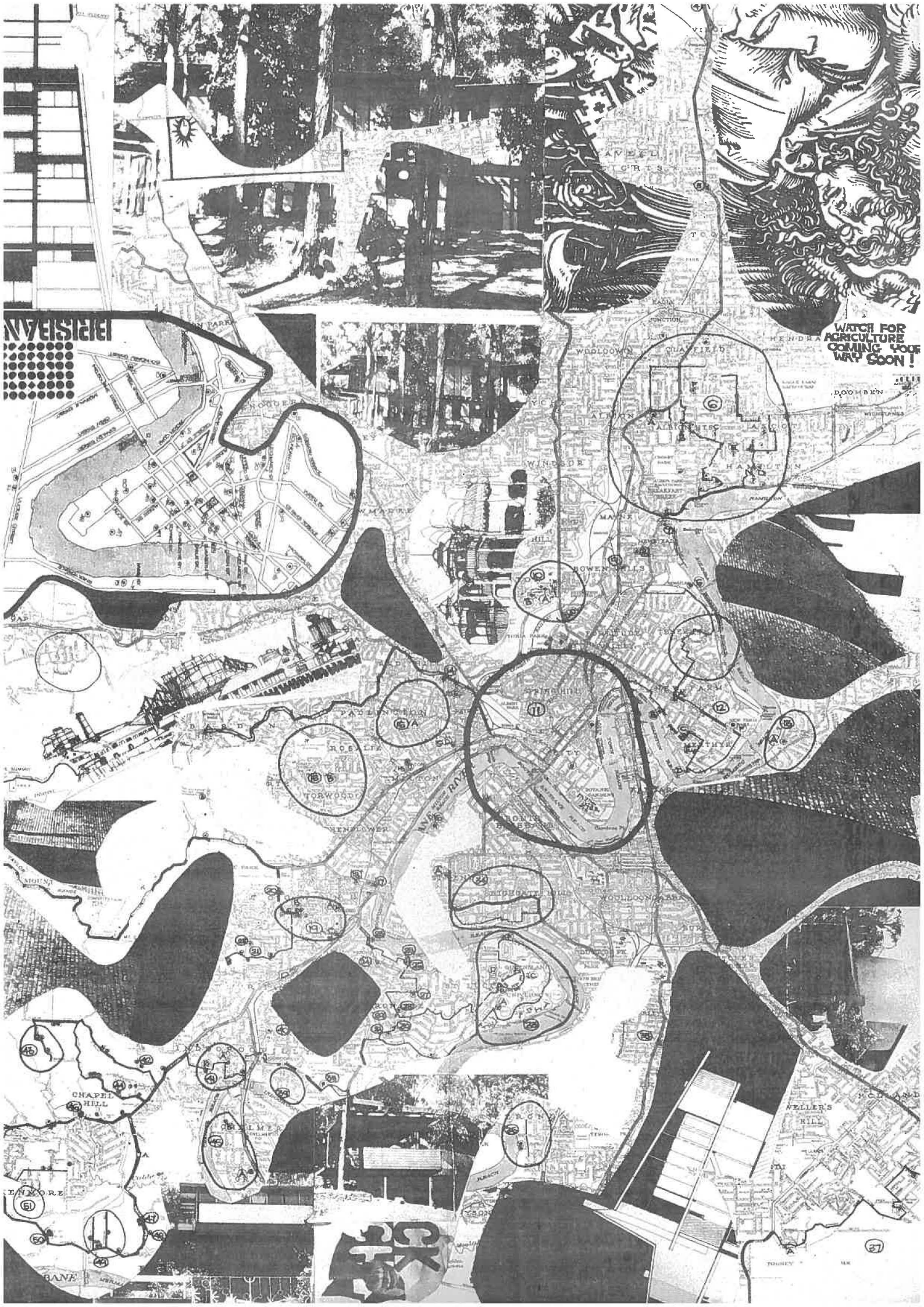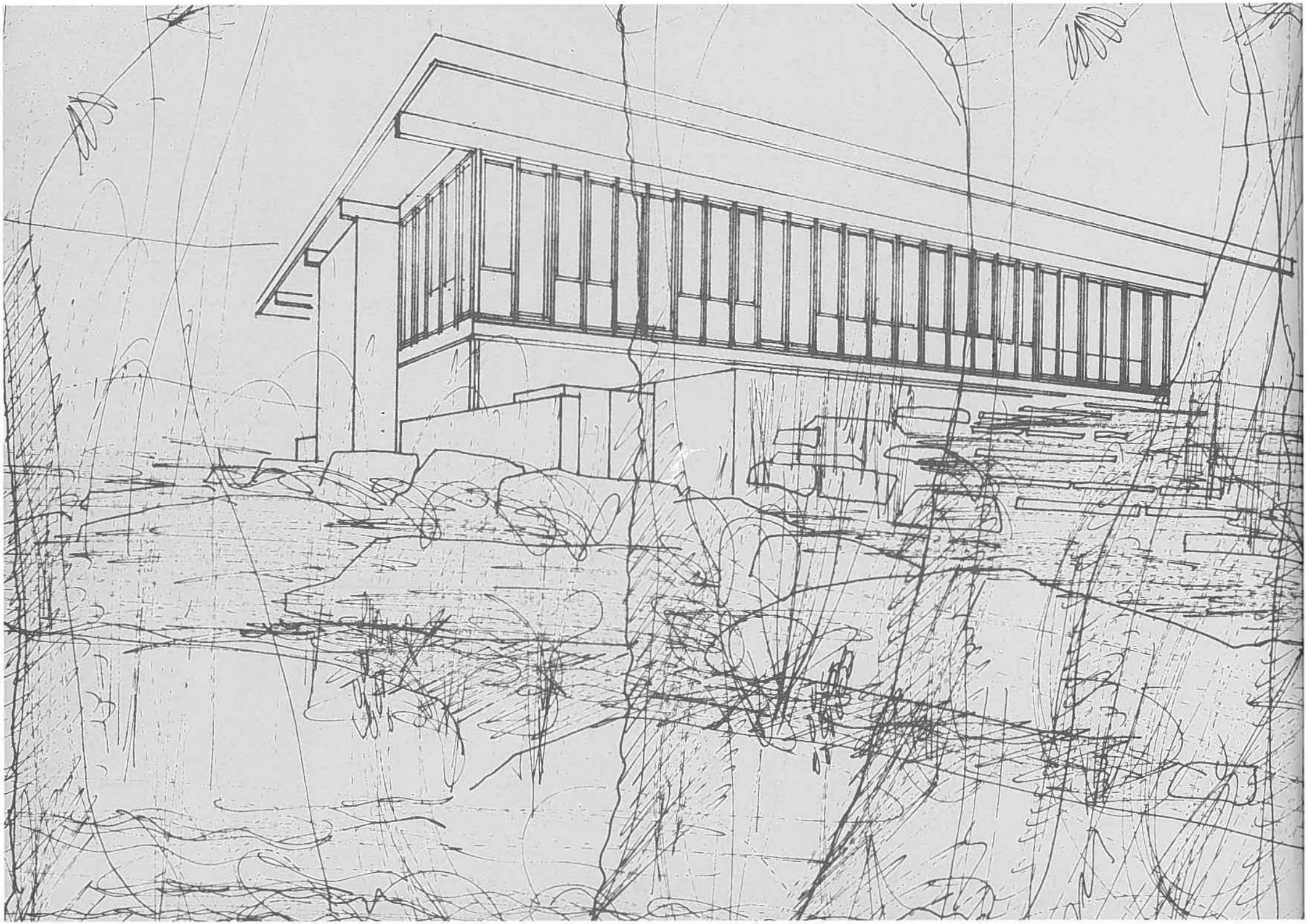
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